Urbanisation in Ancient India

VIJAY KUMAR THAKUR

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Preface

URBAN studies is a comparatively recent field of academic discipline, though cities are the oldest artefacts of civilised life. This apathy was mainly due to the fact that till the Industrial Revolution, the city was viewed by most social thinkers as the image of society itself, and not some special or unique form of social life. In the ancient world this identification was betrayed in the writings of Plato, Aristotle, Kauṭilya and Augustine; during the re-emergence of city life in the medieval period it could be inferred from the writings of Machiavelli; and during the 18th century this spirit was emphatically stressed by Rousseau. Occasionally the city was treated as a special society, for instance, in the work of the 17th century philosopher Jean Bodin. But, ironically, contemporary social thought hardly regarded such interpretations worth its attention. This identification of society and city, however, changed during the Industrial Revolution of the last two centuries because the cities themselves changed. The newly emerging industrial cities meant something tangled and complex, something to be explored as a problem in itself, something that could not be comprehended by the use of a few easy labels or categories. This paved the way for urban studies in the West, but India was late to catch up mainly because of its different social situation. In recent years, however, urban studies are attracting the attention of scholars in this country as well.

In spite of the developments in the field of urban studies, early historic urban centres in India have failed to attract the due attention of scholars. This is the basic reason for the present study, besides, of course, my own interest in ancient Indian urban processes. Naturally, the present work, which substantially

represents my Ph.D. thesis, covers a large span of time—the period which can be roughly termed as the 'Age of the Rise and Decline of Towns in Ancient India'. Consequently attempts have been made to analyse the different aspects of urban growth in our period with a view to presenting a comprehensive and total view of urbanisation and its different manifestations. Urban planning has been deliberately omitted in order to contain the size of the present study.

I take this opportunity to acknowledge my deep debt to my respected guide Professor Radhakrishna Choudhary, who has devoted his entire life to the study of Indology. Professor Lallanji Gopal helped me in the first stage of this work, which is a matter of pride for me. Professor Upendra Thakur was always available for his advice and guidance. Dr Md. Aquique, Magadh University, and Dr Kameshwar Prasad, Patna University, were kind enough to help me whenever needed. Shri Gopi Raman Choudhary of the Bihar Research Society and a number of friends and colleagues saw to it that my work was completed in time; I owe much to all of them. The responsibility for opinions expressed in this monograph and for any errors that may have crept in is, however, solely mine. The established system of transliteration has been adopted.

Patna University
3 March 1980

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Abbreviations

ABIA	*The Annual Bibliography of Indian Archaeology*
ABIHI	*The Annual Bibliography of Indian History and Indology*
AHCQ	*Afghanistan Historical and Cultural Quarterly*
AI	*Ancient India*
AR-ASI-CC	*Annual Report, Archaeological Survey of India, Central Circle*
AR-ASI-EC	*Annual Report, Archaeological Survey of India, Eastern Circle*
AR-ASI-FC	*Annual Report. Archaeological Survey of India, Frontier Circle*
ASI-AR	*Archaeological Survey of India—Annual Report*
ASIR-Cunningham	*Archaeological Survey of India Report* by Cunningham
AŚ	*Arthaśāstra*
BMQ	*British Museum Quarterly*
CII	*Corpus Inscriptionum Indicarum*
EI	*Epigraphia Indica*
GOS	Gaekwad Oriental Series
HOS	Harvard Oriental Series
IA	*Indian Antiquary*
IAC	*Indo-Asian Culture*
IAR	*Indian Archaeology—A Review*
IC	*Indian Culture*
IHQ	*Indian Historical Quarterly*
IHR	*The Indian Historical Review*

INC	*Indian Numismatic Chronicle*
JAH	*Journal of Asian History*
JAHRS	*Journal of the Andhra Historical Research Society*
JAOS	*Journal of the American Oriental Society*
JASB	*Journal of the Asiatic Society of Bengal*
JBBRAS	*Journal of the Bombay Branch of the Royal Asiatic Society*
JBORS	*Journal of the Bihar and Orissa Research Society*
JESHO	*Journal of the Economic and Social History of the Orient*
JGKSV	*Journal of the Ganganath Jha Kendriya Sanskrit Vidyapeeth*
JH	*Journal of History*
JIH	*Journal of Indian History*
JNSI	*Journal of the Numismatic Society of India*
JOIB	*Journal of the Oriental Institute*, Baroda.
JOR	*Journal of Oriental Research*, Madras
JRAS	*Journal of the Royal Asiatic Society of Great Britain and Ireland*
JRASB	*Journal of the Royal Asiatic Society of Bengal*
JUPHS	*Journal of the U.P. Historical Society*
Mānasāra	*The Architecture of Mānasāra*
Manu	*Manu Smṛti*
MASI	*Memoirs of the Archaeological Survey of India*
Milinda	*Milindapañho/The Questions of King Milinda*
NIA	*New Indian Antiquary*
NS	New Series
PIHC	*Proceedings of the Indian History Congress*
QRHS	*Quarterly Review of Historical Studies*
SBB	*Sacred Books of the Buddhists*
SBE	*Sacred Books of the East*
Viṣṇu	*Viṣṇu Smṛti*
Yājñ	*Yājñavalkya Smṛti*

1

Introduction

URBANISATION in ancient India had two distinct phases. The Harappan cities which emerged in the middle of the 3rd millennium B.C. collapsed after about six hundred years without leaving any surviving urban centres. It was only after another thousand years or so that towns emerged in ancient India for the second time. Although it can be presumed that during the intervening period some of the Harappan cultural elements were sustained by the successive cultural groups, it should be admitted that the first urbanisation made very little contribution to the re-emergence of urbanism[1] in India in the early historical period. The second phase of urbanisation emerged and flourished in an altogether new socio-economic milieu generated by the widespread use of iron technology and its extension to the field of production. Here lay the basic difference between the two phases of urban growth. While the Harappan cities had a weak technological base, the cities of early historical India took off

with a solid background. Naturally, the second urbanisation never reached a breaking point of the Harappan type and maintained a continuity unlike its predecessor.

The Harappan cities, since their excavation, have attracted due attention,[2] but the same is not true of the cities of historical India. Although attempts have been made to study the various aspects of city life of this period, most of these works are inadequate in terms of urban studies. An analysis of some of these modern works bearing on our topic fully illustrates this point. B.B. Dutt was one of the earliest historians to write a book on ancient Indian cities[3] and it was solely devoted to town-planning.[4] This work is mainly based on *Arthaśāstra*, *Mānasāra* and *Mayamatam*. Not only have these texts been used uncritically, but even their dating has been practically ignored, while archaeology is a major casualty throughout the book. Naturally, the picture which emerges from this study is, at times, utterly misleading.

Stuart Piggott was the next to write a small monograph on ancient Indian cities.[5] As this book was written "for those who, with an interest in Indian history and its monuments or art and architecture, have no specialized knowledge and want a reliable background to give their visits to ancient sites some significance. . .,"[6] it has been reduced to a mere travel-guide. Not only the plan of the book is haphazard, but it also suffers from a lack of historical sense. Only very few ancient sites have been discussed and that too from a tourist's point of view.

G.S. Ghurye was the next to make a sociological analysis of cities of India. He is mainly concerned with modern data, but the chapter dealing with capital cities of India touches upon some aspects of historical cities also.[7] Here his main concern is, however, the analysis of A. Toynbee's formulations regarding capital cities. He hardly deals with urbanisation or urbanism and is mainly concerned with controverting the conclusions of Toynbee. As a result, the book fails to convey any meaning in terms of urbanisation and its various facets.

Town-planning in ancient India, however, seems to have attracted more attention, obviously because the extant literary texts refer to this aspect of town life in details. Amita Ray's book is a case in point.[8] Although the book devotes only 17 pages to town-planning, it is significant because a conscious

attempt has been made to utilise the available archaeological data. Yet, the basis of the book is contemporary literature, archaeological data seems to have been used as mere appendices without having been related to the main theme. Still the book marks a beginning in the sense that it reflects an awareness of archaeological data on the part of urban historians writing on ancient India.

But unfortunately the first full-fledged work on ancient Indian cities seems to have completely lost sight of this perspective.[9] Rai's complete reliance on literary texts, together with their reckless use without caring for the date of composition, makes the work not only confusing but also devoid of proper historical perspective Although he realises the importance of trade in the context of urban growth, he fails to make use of this phenomenon while demarcating the different phases of urban development in early India. Corroboration by archaeological sources might have enhanced the value of the book, which is otherwise another addition on the topic in the tradition of B.B. Dutt and others.

B.N. Puri's book seems to be a mere revised edition of Stuart Piggott's monograph, though the former is more comprehensive in the sense that it covers almost all the cities of ancient India.[10] The treatment of the subject is site-wise and an attempt has been made to collect evidences from both archaeology and literature. The book lacks not only in references, but the different aspects of urbanism too do not find any place. The nature of the work becomes evident from the preface to the book where the author says that the book "presents a picture. . .of sites of political and religious importance".[11] That urbanisation is distinctly associated with certain economic developments, has been completely ignored.

The last but the most important contribution to the subject is a small but compact monograph by A. Ghosh.[12] This book is a major contribution to the study of ancient towns in many ways. It gives evidence of author's intimate acquaintance with both literary and archaeological sources relating to ancient towns as well as his familiarity with recent sociological studies about urbanisation. Though his conclusions are by and large balanced, yet not all of them can claim universal acceptance. His assertion that the Harappa culture made no contribution to the rise

of towns in early historical India[13] seems to be only partially true. One is in complete agreement with him that the post-Harappa phase did not witness an urban culture for quite a long time, but it is difficult to accept his theory of the death and complete disappearance of a culture, especially when we know that the inhabitants of the Harappan zone did not die with the decline of cities and they probably settled in new areas. One cannot, in the light of available archaeological evidences, postulate or assume, like Ghosh, a period of 1000 years of gestation.[14] Moreover, Ghosh tries to underplay the crucial role of iron in inaugurating urban life in northern India and tries to emphasise the primacy of political power in generating an urban way of life.[15] Here it will suffice to say that political authority can force a rural community to part with its surplus only if a surplus is produced, and in early historic India this surplus came to be produced certainly after technology was developed. The major limitation of Ghosh's work is, however, its preoccupation with the origins of urbanisation in historical India; he does not discuss the various aspects of urbanism. This does not in any way undermine the importance of the book, for Ghosh is the first author who discusses urbanisation of early historic period with the perspective of an urban historian.[16]

Here it may be pointed out that none of the authors who have written on ancient Indian towns seems to realise the importance of technological factor in the growth of towns. A. Ghosh is the only writer who has referred to this aspect, but he too seems to undermine its role in the emergence of towns. This tendency seems to have stemmed from an over-reliance on the sociological theories of L. Mumford[17] and G. Sjoberb.[18] Both of them have unduly emphasised the role of political power in the emergence of towns, a view which finds reflection not only in the writings of Ghosh, but in other recent researches on ancient Indian towns too.[19] In all such writings it is presumed that an economy capable of giving rise to towns can be developed as well as maintained only by a political system. Such a theorisation, however, fails to appreciate the factors that lead to the evolution of a political system. States never grow in a vacuum. They are basically the product of the mode of production obtaining in a society. This will suggest that the growth of political power is very much linked up with the prevailing

mode of production. The society was tribal in the early Vedic period and hence the tribal form of government. Once a settled agrarian economy started taking shape, things began to change, finally leading to the emergence of *mahājanapadas* in the early historical period. In fact, the prevailing economic situation not only leads to the growth of a political system but also sustains it.

The role of iron technology, in particular, has to be emphasised in the early Indian urban context. "The iron was a cheap metal and it provided a tool of such hardness and sharpness that no stone, no other known metal could withstand it. Iron made possible field agriculture on a larger scale and the clearing of extensive forest tracts for cultivation."[20] It is, however, wrong to suggest that in the Indian society the impact of iron would have been slow,[21] for iron technology during the early historical period hardly faced the problem of diffusion, it had already appeared in the various parts of northern India in pre-600 B.C. period.

This brings us to a discussion of the theoretical aspects of urban growth. It was V. Gordon Childe who first formulated the concept of Urban Revolution in 1936,[22] and in 1950[23] he put forward a clear delineation of the archaeological traits accompanying the earliest city:

(1) The first cities must have been more extensive and more densely populated than any other previous settlements.
(2) While there might have been peasants cultivating lands outside the cities, all cities must have accommodated non-food-producing classes supported by the surplus produced by the peasants.
(3) Each primary producer paid over his surplus to a deity or divine king who thus concentrated the surplus.
(4) Truly monumental buildings were constructed which not only distinguished each known city from the village but also symbolised the concentration of social surplus.
(5) The non-food-producing specialists were supported by the surplus concentrated in temples or royal granaries and were dependent on the temple or court. Amongst the specialists priests, civil and military leaders and

officials absorbed a major share of the surplus and thus came to form the 'ruling class', which conferred substantial benefits upon the subjects in the way of planning and organisation.

(6) The political expediency compelled the ruling class to invent systems of recording and exact, but practically useful, sciences. Revenue administration obliged the administrators to invent writing and numeral notation.

(7) The invention of writing enabled the leisured clerks to elaborate more exact and predictive sciences—arithmetic, geometry and astronomy.

(8) Other specialists gave a new direction to artistic expressions by carving, modelling or drawing according to conceptualised and sophisticated styles.

(9) The concentration of surplus also facilitated foreign trade.

(10) In the city craftsmen were provided with raw-materials needed for the employment of their skill and also guaranteed security in a state organisation based on residence rather than kinship. Itinerary was no longer obligatory. The city was a community to which a craftsman could belong politically as well as economically.

Naturally, all the ten criteria laid down by Childe have not gained universal acceptance. In fact, at one point an urban status was assigned even to pre-pottery settlements, thereby invalidating Childe's hypothesis that writing is a necessary trait of urbanism. A stage of Jericho primarily on the strength of its imposing architectural structure[24] and more recently, the magnificence of his finds at Catal Huyuk[25] led Mellaart to assign an urban status to this chalcolithic Anatolian settlement though it lacked writing. The controversy, however, no longer exists, for Mellaart himself calls Catal Huyuk a neolithic town,[26] not a city. Thus it is beyond reproach that in the classificatory system of archaeology the art of writing is the most important feature which should distinguish a civilised urban group from its barbarian contemporaries or ancestors.

Similar doubts have also been raised against certain other traits mentioned by Childe. Adams questions the significance of

the appearance of representational art.[27] This phenomenon is, at least, not immediately apparent with the emergence of cities. Certain other urban traits outlined by Childe, for instance, exact and predictive sciences, are largely a matter of interpretation from fragmentary and ambiguous evidences. Adams even questions Childe's attempt to identify Urban Revolution on the basis of these traits, which he calls 'loosely associated features'.[28] This criticism, however, fails to do justice to Childe.

To understand any socio-economic-cultural phenomenon an archaeologist is bound to depend on a number of apparently loosely associated but tangible traits, otherwise archaeology itself would fail to convey any meaning.[29] And Childe has done exactly that. Moreover, we have not been offered yet anything more satisfactory than Childe's ten traits for the delineation of the Urban Revolution. Even Braidwood's eight traits of Urban Revolution do not differ significantly from those of Childe.[30]

Childe's theoretical scheme to account for Urban Revolution has also been challenged. The ten criteria suggested by him resolve themselves into a group of primary variables and a large group of secondary variables. The primary motivating forces for the urban origin being the rise of new technology and subsistence patterns.[31] Childe's emphasis on technology as the prime moving force behind Urban Revolution is more explicit in *What Happened in History*: "The thousand years or so immediately preceding 300 B.C. were perhaps more fruitful in inventions and discoveries than any period of human history prior to the sixteenth century A.D. Its achievements made possible that economic re-organization of society that I term the 'Urban Revolution'."[32] The most important invention was the copper-bronze metallurgy, "the first approximation to international science".[33] This combined with other inventions and discoveries broke down the comparative self-sufficiency of the earlier peasant communities and the way was paved for a new settlement pattern which manifested itself in the form of the city.

Childe's conceptual scheme was criticised by Braidwood who said that the "emphasis on cultural growth and process as civilization appeared makes our interpretation different from that of Gordon Childe. . . The great change between pre-civilization and civilized human life came in those realms of culture other than the technological and economic."[34] Adams, who is

of the same opinion, argues that metallurgy came to be effectively developed only in Early Dynastic Mesopotamia when the cities were already a feature of the Mesopotamian society.[35] In the case of Egypt, according to Adams, the decisive Early Pharaonic Power was accompanied by little more in the way of technological change than an enhancement of the supply of raw materials.[36] He further adds that the later technological superiority, in other words, may have had little to do with the processes which brought the city into being.[37] Agricultural surplus, no doubt, was necessary but without an established political authority this surplus could not have been effectively channelled so as to give expression to urban settlements. Stretching the argument further, Ghosh asserts that the prerequisite for the growth of urbanisation is not a hypothetical surplus but an administrative and mercantile organisation—the ruler and the merchant, both of the city and each the ally of the other in history.[38] Thus he holds that surplus was not a technical but a social product; 'the institution created the surplus, which is not "there" the moment it is technically possible but only after it has been institutionalized through taxes, trade and other means'.[39] Therefore, in the production of surplus the non-agricultural aspect is dominant in the form of procurement.[40]

Ghosh, however, seems to forget the basis of trade and the origin of the mercantile community. Trade itself implies surplus production. Moreover, the criticism of Childe is based more or less on the shifting of emphasis from technology to political authority. In this scuffle the main point seems to be lost. Childe specifically mentions that surplus was a precondition for the growth of the village into a city,[41] and within the city the accumulation of surplus was restricted to a small group, which ultimately split the society into classes.[42] Childe is very much correct in saying this because it was the development in technology which ultimately produced the surplus. It was only after production of this surplus that political power came into picture. To emphasise the role of political authority at the cost of technological innovations in the field of agriculture is to put the cart before the horse. It has also been contended that surplus could not have been produced without a need for it arose and the need arose only when political authority pressed for it.[43] But this would mean

that agricultural production year after year was so planned and calculated that hardly anything was left at the end of the year. But we know it for certain that the agricultural communities must have started producing surplus as soon as a need for certain non-agricultural products arose. Moreover, surplus must have been produced and then accumulated for future exigencies. This would have been all the more necessary in ancient communities for their agriculture mostly depended upon nature and a single crop failure would have wrought havoc on that society. We feel that the idea of surplus yield is itself present in the very concept of agricultural production. This fact is also attested to by a number of Vedic hymns wherein a sacrificer always desires to possess as much cattle and agricultural wealth as possible. As soon as the agrarian society came in a position to produce a sizable amount of surplus, the way was paved for urban growth.

Childe's use of the word 'Revolution' in the context of urbanisation has also been objected to. It has been asserted that the event was not momentous enough to warrant the use of the epithet of Revolution. Mumford thinks that though "the term does justice to the active and critically important role of the city, it does not accurately indicate the process, for a revolution implies turning things upside down, and a progressive movement away from outworn institutions that have been left behind...The rise of the city, so far wiping out earlier elements in the culture, actually brought them together and increased their efficacy and scope."[44] Frankfort's objection, like Mumford's, is based on the fact that the word 'Revolution' implies violent change but the facts do not suggest so.[45] Daniel prefers to use the Greek word 'synoecism', meaning 'coming together'.[46] Redfield's acceptance of the word 'Revolution' is not without hesitation.[47] Childe himself, however, points out that the urban-growth process was so finely divided in the archaeological sequence that it is rather impossible to delineate the precise point at which the Revolution took place, when quantity passed over into quality.[48] Notwithstanding this clarity on Childe's part he has been attacked by Wilson too, who, in the context of Egypt, has gone to the extent of saying that "one may accept a truth in Childe's 'Urban Revolution', provided it is understood that it was not 'urban' and was not

a 'revolution'."[49] But these arguments and counter-arguments are purely of academic interest and if analysed carefully Childe's theory of 'Urban Revolution' is the most appropriate term in the present stage of our knowledge.

Ghosh, however, raises a basic problem when he hesitates to use the word 'urbanisation' in the Indian context.[50] He says that in both the Indus and the early historical periods, there was no large-scale drift to the city, as the word would lead us to expect.[51] "The vast population continued to be rural, and nothing altered the predominantly rural character of the land."[52] It seems that Ghosh's only criteria, or rather the most important one, for calling a period urban, is the large-scale rural-urban migration. This raises a fundamental question : Is the term 'urbanisation' to be used only in a context where one can be sure of a large-scale drift from villages to towns ? Ghosh, while dealing with ancient urbanisation, has, consciously or unconsciously, tried to impose the features of a modern urban society because in no pre-industrial society was there any large-scale drift to the city. In every ancient context,[53] the society was predominantly rural, and the rural element was quite strong even within the city walls. Mumford has clearly shown that even the Greek cities of the fifth-fourth centuries B.C. were quite close to rural way.[54] This, however, should not be taken to mean that "the full urbanite of antiquity was semi-peasant" as Max Weber mistakenly suggests.[55]

The second urbanisation in India which started in the early historical period continued unabated up to the time of the Guptas. In this context, it is undeniable that there was a drift from the village to the city over all these centuries. The drift might not have been large-scale but in no pre-industrial society was this drift massive. But, then the cities which sprang up gave birth to a new series of practices and institutions which affected the society in a way that things at times were turned upside down.[56] With this perspective in view one can unhesitatingly use the term urbanisation in the context of ancient Indian society.

With this conceptual framework, let us now examine the validity of Childe's ten traits of urban revolution in the context of the origins of city in early historical India. His first criterion regarding the size of a city and its density of population is

quite obvious. The size of a pre-industrial town could not have been very large but even mounds extending at least over one square mile may indicate quite a sizable population. In fact, in the absence of any large-scale horizontal excavations as well as any attempt to make a statistical tabulation of population data, nothing can be said with certainty. On the basis of numerous literary references, however, we can presume that the towns were centres of population and the number of persons living therein was in any case greater than of those living in the surrounding villages.[57]

Childe's second criterion regarding the accommodation in towns of non-food-producing classes, like specialists—craftsmen, transport-workers, merchants, officials and priests, who thrived on the surplus produced by peasants, is equally applicable to the Indian context. Towns which originated were centres of trade as well as political power. Political power in those days was very much aligned towards the temporal power because the loyalty of the people was directed not towards the state but towards the social order. The priest became almost inseparable from the king, the former being the manifestation of the social order. But once the rural barriers started breaking up, in the new urban milieu the priest started losing his position. On the other hand, trade required a full-time merchant class as well as certain specialist-craftsmen who could manufacture goods that were in demand in the foreign markets. They were also supposed to cater to the needs of the new sophisticated urban class. All these classes of people, who were not engaged in primary production due to their own specialised avocations, thrived on the surplus produced by the peasants in the outlying villages.

Childe's third criterion, however, needs some modification as far as the early historical India is concerned. There did not exist either a city-god of Mesopotamian type or a divine king of Childe's imagination. Here too, however, it was the king, who collected the surplus through various taxes. The emergence of taxation in the post-Vedic period[58] probably indicates this fact. The emergence of state apparatus with all its ramifications could not have been possible without a sizable surplus.

Of monumental buildings, Childe's fourth criterion of the

city, there is not much trace. The only probable exception being Bhir Mound, the first city of Taxila. Here one encounters a pillared hall within a house-complex with larger rooms than elsewhere; the hall was perhaps the reception room of some dignitary's house.[59] Marshall, however, thinks that it was a shrine and the house attached to it "may have been occupied by priests and their attendants and disciples"[60]. In the 1944 excavation another structure, which Ghosh thinks to be a public building,[61] was exposed.[62] The remains at Kauśāmbī belonging to this period are not very imposing.[63] The Ghoṣitārāma monastic complex in north-eastern part of the city, however, deserves mention.[64] The structures at Rājagṛha, even the *stūpas*, are hardly monumental.[65]

Monumental buildings, which took the form of temples and other religious edifices in chalcolithic civilisations, had probably no justification for their appearance in early historical India. The religious beliefs and practices of the north Indians were such as not to necessitate the construction of any edifice, except with the Buddhists who had their *stūpas* right from the beginning but they were unpretentious and hardly monumental.[66] Remains of early palaces are also absent[67] though it is certain that they were built. Since the Āryans did not practise burial, since the climate of the middle Ganga basin was far more moist in earlier times and the area subjected to floods and the burnt bricks were not being used, the material remains could not survive till our times. The early availability of timber, most probably due to large-scale felling of trees for extending the agricultural land, made wooden structures common, but they perished leaving pitiful remains, as at Kumrahar.[68] In fact burnt brick came into use quite late. At Pātaliputra,[69] Vaiśālī,[70] Ujjain,[71] Besnagar[72] and Ahichchhatra[73] burnt brick came into vogue in the late phase of the Northern Black Polished Ware. On the other hand at Hastināpura,[74] Rājghāt,[75] Mathurā,[76] Charsada,[77] Tilaurkot,[78] Atranjikhera,[79] Kauśāmbī,[80] Sonpur and Chirand,[81] burnt brick came to be used even later. Outside north India, at Navadatoli the first burnt-brick structure appears after 400 B.C.[82] At Nasik,[83] Nevasa[84] and Tripurī[85] the use of brick is post-Mauryan. Keeping this in view the reason for the disappearance of monumental structures becomes quite obvious.

The formation of a ruling class, which is the fifth criterion

of Childe, is quite explicitly mentioned in the contemporary literature. The later Vedic age witnessed the emergence of territorial monarchy concomitant with the transformation of the nature of kingship.[86] The royal power increased and now the king could even grant land with the consent of the clan.[87] Another remarkable feature of this period was the development of two important organs of government, taxation system and official machinery.[88] The increase in the royal power is also attested to by the lessening importance of the popular assemblies. In fact, the king assisted by the Brāhmaṇas and the war-chiefs came to dominate the whole scene.

It also seems applicable to early historical Indian context that the ruling class conferred some benefits upon their subjects in the way of planning and organisation. Although we do not have Harappan type of evidence of public sanitary arrangements, yet there are indications of internal arrangements to individual houses together with certain broad arrangements for planning. In the earliest phase of Bhir Mound sewage was thrown into private soak-wells in each house.[89] At Kauśāmbī too there were soakage-jars, ring-wells and pottery drains, all belonging to *c.* 400 B.C.[90] Though the references to the planning of cities in the contemporary literature may not be accepted in their totality, they give us an idea of the laying out of streets, the planning of city proper, etc.[91]

Writing as an essential feature of city life—the next criterion of Childe—is much disputed. But as we have discussed earlier it is now generally taken to be an important aspect of city civilisation. Sjoberg too agrees that the use of a writing-system is a single firm criterion for distinguishing the city from other types of habitation centres.[92] According to him, 'pre-industrial civilized society' and 'literate pre-industrial society' are synonymous.[93] Our early historical cities certainly fulfil this criterion. The earliest evidence of writing in early historical India comes to us from the period of Aśoka; Aśokan edicts are the earliest written decipherable records of ancient India. His edicts were inscribed in Kharoṣṭhi and Brāhmī scripts and the language used was Prakrit. Now one thing is certain that any script takes some time to evolve itself. When exactly Brāhmī and Kharoṣṭhi came into use is not definitely known, but they had established themselves by Aśokan period, and some time-lapse must be allowed

for their standardisation. Again, Pāṇini's *Astādhyāyī* which is a standard work of Sanskrit grammar, and which can be dated to *c.* 5th century B.C., indicates the advanced stage of Sanskrit language and by implication points towards the evolution of a script of some type.

Though much cannot be said about the *raison d'etre* of the origin of either Brāhmī or Kharoṣṭhi scripts, yet it is certain that they did not have any sacerdotal reason, as was the case in ancient Sumeria. To us it seems that these scripts originated as *a result of certain politico-economic changes in the 8th-7th* century B.C. society. The growing trade and the establishment of territorial power in the later Vedic period needed a method of maintaining records, and it was possibly this necessity which ushered in the era of writing.

Though astronomy, geometry and arithmetic, the seventh criterion of Childe, developed in India in this period, it is difficult to establish their connection with urbanism. They probably developed out of sacerdotal exigencies. The Vedic sacrifices needed altars of specific sizes and shapes, and the art of construction of such altars was known as *Śulba.*[94] It was probably out of this that the science of geometry developed. Ghosh thinks that the science of astronomy too developed out of religious necessity,[95] but we have no evidence to this effect. It seems that astronomy had a secular origin.[96] Arithmetic too had a somewhat similar origin.[97] Though their connection with urban growth cannot be established, we know it for certain that much of the later Vedic literature wherein they have been developed, grew under royal patronage, of course, as a byproduct of the accumulation of social surplus. But Childe's contention that it was the leisured clerks who invented these predictive sciences is completely out of place in the present context.

Ghosh thinks that no spirit in artistic activity—the eighth criterion of Childe—can be noticed in the early part of our period.[98] To support his contention he asserts[99] that we do not possess any pre-Mauryan stone sculpture, either in native tradition, such as the later Yakṣa-figures, or in imitation of foreign styles, such as the pillar-capitals of Aśoka.[100] But he himself admits the growth of argillaceous art in this period.[101] Though Childe's criterion is not very much applicable as far as

artistic activities in historical India are concerned, his basic contention that specialists gave a new direction to artistic expressions is to some extent reflected in the Northern Black Polished Ware, which originated in this period. It was a deluxe ware reflecting a marvellous feat of technological advancement. In fact, the surplus produced in this period facilitated the emergence of a leisured class among the affluent sections of the upper classes and this class was in a position to indulge in fine arts and give patronage to various craftsmen and artists.[102]

Childe's ninth criterion regarding extensive foreign trade has been taken to be inapplicable by Ghosh in the Indian context.[103] But on the basis of a recent study, it can be argued that some foreign trade existed in this period.[104] As far as imports are concerned, silver for punch-marked coins was certainly being brought from outside the country. Internal trade was, however, in a flourishing condition.[105] Trade was rather facilitated by the advent of money economy, which was ushered in by the use of punch-marked coins in this period. Development of trade-routes as well as sea-voyages is attested to by a number of *Jātakas*.

Urban resident's security in the state organisation and the emergence of a sense of community in city—Childe's last criterion—is partially applicable to the early historical Indian cities. The specialists who resided in the city must have been looked after by the state. The well-organised municipal government of the Mauryan times makes this fact almost implicit. Equally clear is the growth of a sense of community among the townsfolk. In Pāli literature the city of Vaiśālī is credited with a community-hall where public matters were discussed,[106] but it seems to be a special feature of the tribal republics. *Samājas* were, however, a regular institution from the early times, as attested to by literature and the inscriptions of Aśoka,[107] who discouraged them.[108] They were, however, looked down upon by the law-givers.[109] Such and other similar gatherings were probably manifestations of "the spirit of community". It is, however, equally tenable that considerations of caste[110] and the heterogeneity of interests might have precluded the full manifestation of this spirit.

The crucial problem that remains to be discussed is the

working out of a conceptual framework for the study of early historical urbanisation in India. Both A. Ghosh[111] and D.K. Chakrabarti,[112] taking their cue from the sociological theory of Gideon Sjoberg and Mumford, think that political power was of prime importance in early historical urbanisation in India. Ghosh thinks that political power compelled the people to contribute their surplus to the towns, which also received it through regular channels of trade.[113] "The prerequisite, therefore, is not a hypothetical surplus but an administrative and mercantile organization—the ruler and the merchant, both of the city and each the ally of the other in history."[114] While discussing the role of iron in the second urbanisation in India Ghosh asserts that no technology can flourish unless there is a congenial social climate for its growth and technology cannot be used to produce surplus which is not needed,[115] thereby emphasising the role of political authority which, according to him, got the surplus produced. He also seems to be in line with Sjoberg's assertion that "It is the primacy of political power in providing the social stability necessary for the maturation of commerce and manufacturing that is responsible for our de-emphasis of the role of purely economic or commercial factors in the rise (and diffusion and decline) of cities. These forces are significant on their own account; yet they can operate only under the aegis of a broader societal power structure."[116] D.K. Chakrabarti too agrees with it[117] and thinks that the Urban Revolution was "pre-eminently a social process".[118]

Though we have no idea of the social climate of the first users of iron in the Ganga basin, the material climate of the area seems quite favourable to the use of iron technology. The thick jungles of the Ganga basin certainly posed a problem to the expanding Āryans but the neighbouring areas provided iron, most notably in south Bihar, with which the forests could be turned into agricultural fields. Ghosh, however, over-focuses the process of burning forests in this period as is evident from the story of Videgha Māthava in the *Śatapatha Brāhmaṇa*.[119] But he forgets that even when the jungles are burnt the deep-rooted and hard-fibre *sal*, *seasum*, *mahua*, *pipal* and similar other trees flourishing in a rainfall of about 50 inches would have to be cut down by the iron axe. He also ignores the fact that the trees growing in higher altitudes under lower tempera-

ture have softer fibres and can be more easily cleared than those found in the middle Ganga basin. Iron, which was definitely introduced in the Gangetic basin by the 7th century B.C., facilitated this process. The rise of the Magadha power is rightly ascribed to the availability of iron in this area. It also seems plausible that by 5th century B.C. iron metallurgy was developed. To the lustrous surface of the NBP is attributed steel-like quality.[120]

The production of surplus due to the introduction of iron technology went hand in hand with the rapid specialisation in arts and crafts in the age of the Buddha. Of course, the king, his soldiers, officials, the craftsmen and the monks of the new heterodox sects required food and this food came from the villages. R.S. Sharma goes to the extent of saying that it was the differentiation of occupations which contributed to urbanisation in the age of the Buddha.[121] In the final analysis, it seems that political authority became necessary only when it was felt that a regular supply of foodstuff from the villages to the towns was necessary for the survival of the townsfolk. Without this realisation the political power would hardly have come to play any role in the context of urbanisation. In fact, the early historical state of India was itself a product of iron technology.

A comparison between early historical cities and Harappan cities would make explicit the role of technology in urbanisation. We shall, for our purpose, take the case of tools and implements. Although a Bronze Age people, the Harappans used bronze sparsely. Iron objects were used on a much larger scale in the Ganga basin sites than the bronze objects in the Harappan sites.[122] This clearly indicates that the technological base of the Harappans was weak when compared to that of the early historical iron-users. This will explain why Harappan cities disappeared subsequently, whereas no such thing happened in historical India. We know it for certain that the Harappans had a centralised political authority, while such an ingredient was mostly absent in historical India. This undoubtedly establishes the primacy of technology as far as urbanisation is concerned.

In the light of the above discussion, seven out of ten features, suggested by Chidle, may be accepted as relevant in the case

of urbanisation in early historical period in north India. These are: (i) dense population, (ii) existence of non-food-producing specialist class supported by the surplus produced by peasants, (iii) monumental buildings, (iv) existence of a ruling class, (v) writing, (vi) foreign trade, and (vii) spirit of community among urban dwellers. Two of his other traits can be accepted with some amendments. No doubt, the early historical urban dwellers were acquainted with sciences; these sciences, unlike Childe's assumption, grew out of sacerdotal exigencies. Similarly early historical India hardly provides proof for artistic developments, though we can put the NBP in this category. From the Mauryan period, however, Childe's contention becomes applicable in this context as well. Childe's assumption of the existence of a divine power in the urban context can be rejected outright insofar as India is concerned. Instead the Indian situation betrayed certain other features which can be grouped together with the relevant traits formulated by Childe. Here one of Adam's classificatory factors—reliance on widely different food resources—can be accepted in the early historical urban context in India. While his second factor, i.e., occupational specialisation, tallies with the second criterion of Childe, his third formulation regarding adoption of irrigation[123] does not seem to be quite relevant in the case of the early towns of the Ganga basin. Linked up with the question of food resources is the concept of agricultural hinterland. Another trait of urbanisation, therefore, seems to be the need of a strong agricultural hinterland which becomes necessary for the city. The emergence of guilds in ancient India also seems to be a characteristic feature of the town life. Last, but not the least important, is the emergence of a monetary exchange system,[124] which is very well represented in India by the association of punch-marked coins with the early historical urban growth. Here it may be suggested that fortifications, though not universally applicable, can be regarded as an important trait accompanying urbanisation.

Thus, in the early Indian context, the following criteria may be taken as the traits distinguishing urban centres form rural settlements.

(1) Dense population in terms of at least one square mile

area of the excavated mound; large number of wells and tanks may suggest the existence of dense population, a fact not necessary in case of such towns as are located on river banks;

(2) Accommodation of non-food-producing classes supported by the surplus produced by peasants;

(3) Reliance on widely different food resources;

(4) Strong agricultural hinterland capable of producing a sizable amount of surplus necessary for supporting the various urban settlements (In ancient times when the system of transportation had not developed beyond a point, the urban centres generally depended on their neighbouring hinterland.);

(5) Emergence of a ruling class, which conferred benefits upon the subjects, as well as improved their own area of residence and consolidated their own position, in the way of planning and organisation; this can be discerned, on the one hand, from the existence of planned streets, roads, drainage system, etc , at the excavated sites, and the existence of a municipal government, on the other;

(6) Fortification, though not universal, is yet another aspect of urban development;

(7) Construction of monumental buildings which were symbols of exploitation;

(8) Invention of writing and numeral notation;

(9) Emergence of craft organisations and trade organisations in the form of craft guilds or merchant guilds;

(10) Emergence of a monetary exchange system illustrated by the prevalence of punch-marked coins;

(11) Production and concentration of surplus leading to the facilitation of foreign trade;

(12) A new direction to artistic expression as can be discerned from the NBP;

(13) A spirit of community among the inhabitants of an urban settlement but always in terms of the existing social stratification.

While delineating different traits accompanying the early historical city, it is noteworthy to take into account the views of Paul Wheatley. He suggests that there could be five concep-

tually distinct, though in practice partially overlapping, approaches to the investigation of urban forms: (i) reliance on ideal-type constructs; (ii) formation of ecological theories, (ii) delineation of trait complexes, (iv) conceptualisation of the city as a centre of dominance, and (v) an expediental approach usually based on the size of the urban settlement.[125] Viewed against these approaches our thirteen indices to signify the advent of urban forms in early historical India should be considered delineatory rather than explanatory.[126] We are only suggesting a broad framework for the study of historical cities in India, and through these indices we are not attempting to explain the urban phenomenon itself.

Here we can also take into account some of the geographical and archaeological features of urban settlements which might indicate their nature. In this connection certain geographical and archaeological characteristics associated with particular types of towns may be suggested:

(1) Tools and implements apparently presuppose their use by artisans. These might include large furnaces, ovens, iron smelters, etc., for iron-working and making implements of various categories. The discovery of these objects from an urban site might suggest that it was a centre of manufacture.
(2) Finds of coin-moulds at a particular site might indicate that it was a mint-town.
(3) The discovery of large number of coins from any site may qualify it as a centre of trade and commerce.[127]
(4) Similarly the discovery of structures resembling markets might suggest that the site in question was a market town.
(5) The location of towns on river banks or on known land-routes may also suggest their commercial nature.
(6) Similarly the exposure of any structure resembling a palace might suggest that the site in question was the seat of royal government implying thereby its administrative nature.
(7) Again if a site exposes a structure resembling a dominating temple building or a Buddhist monastic complex, it may be presumed that the site had some religious significance too.

In this context, it should be emphasised that in ancient times hardly any town performed a single function; almost all the towns had a mixed bag of functions to perform. Thus, an administrative centre could also be a thriving commercial centre. Similarly, there were possibly no separate mint-towns; mints might have been situated in administrative centres. Therefore, it is possible that even one single town can produce all the characteristics that we have discussed above, a situation which is natural in the Indian context.

Towns are, however, more clearly classified in ancient Indian literary texts. The *Mānasāra* discusses 8 eight types of fortified cities : *rājadhānīya nagara* (royal or capital city), *kevala nagara* (ordinary city), *pura*, *nagarī*, *kheṭa*, *kharvaṭa*, *kubjaka* and *paṭṭana*.[128] Similarly the *Divyavadāna* refers to *nagara*, *nigama*, *karvaṭa* and *rājadhānī* as different types of towns.[129] While the *Aṅgavijjā* mentions *nigama*, *janapya*, *paṭṭana*, *niveṣa* and *khandavāra*,[130] the *Kāmasūtra* only refers to *nagara*, *paṭṭana*, *kharvaṭa* and *mahati* as urban settlements.[131] Amarasiṁha, however, refers to the following words as synonyms of town or city : *pura*, *purī*, *nagarī*, *paṭṭana*, *puṭabhedana*, *sthānīya* and *nigama*. He also says that the *śākhā-nagara* (branch-town) is a town (*pura*) other than the *mūla-nagara* (original city or main city).[132]

The different categories of cities discussed in the ancient literature may broadly be categorised under two heads : politico-administrative and economic. While *nagara*(*ī*) seems to be the most popular word for town in ancient times, a similar use of the word *pura* (*ī*) is also evident, but the currency of the latter word seems to have been confined to Sanskrit texts.[133] These two synonyms were used to denote all categories of towns irrespective of their functional nature. The same, however, cannot be said of the other synonyms used for town in ancient literature. Either they had some economic connotation or were administrative centres. Surprisingly, unlike archaeology, literature makes clear distinction between different categories of towns and hardly gives the picture of their mixed functions.

The more important categories of towns seem to be the following: *rājadhānīya*, *sthānīya*, *kharvaṭa*, *kheṭa*, *puṭabhedha*, *nigama*, *paṭṭana* and *droṇamukha*. Out of these the first four were administrative towns, while the rest were economic centres.

The *rājadhānīya*, which was the capital city, was the biggest town of all and it was the seat of central administration. The *sthānīya* seems to be the next important administrative town. According to Kauṭilya, a *sthānīya* should be located at the centre of 800 villages and could at times serve as a capital.[134] From the description in the *Arthaśāstra* on this point it seems that it was the main administrative town of a *janapada*. The *kharvaṭa* was another administrative town, which was next to *sthānīya* in importance. It has been referred to as the main town located at the centre of 200 villages,[135] apparently it had administrative functions to perform. The *Arthaśāstra* also has two other words, i.e., *khārvaṭika* and *kārvaṭika* for this settlement,[136] The *kheṭa*, however, seems to be a despised urban settlement.[137] It too might have been an unimportant administrative centre especially in the "uncivilised" areas.

The rest of the four categories of towns, however, seem to have been commercial centres. Thus a *puṭabhedana* was a big commercial centre. The word occurs in the *Mahāparinibbāna-sutta* for Pāṭaliputra[138] and in the *Milindapañho* for Sāgala.[139] These places seem to be centres of wholesale trade. Similarly *nigama* too seems to be a merchant-town or market-place. Its mercantile association is manifest from the fact that in ancient texts a merchant is called *naigama*.[140] The *nigamas* also issued coins under their own authority, especially in post-Mauryan times, as in the case of Taxila[141] and Kauśāmbī.[142] Thus, it is difficult to agree either with Rhys Davids' suggestion that there was no hard and fast line between *gāma* and *nigama*,[143] or Wagle's assertion that "these two words have been used more or less as synonyms",[144] in Pāli literature. The *paṭṭana* was yet another type of town associated with economic functions. It was a coastal trading port-town, as is clear from contemporary texts.[145] The *droṇamukha* was a town situated at the mouth of the river and, therefore, it was a trading centre.[146] Kauṭilya, however, suggests that it is a town located at the centre of 400 villages.[147] The contemporary texts also refer to certain other types of towns, like *khaṇḍavāra* or a military encampment, *niveṣa* or an encampment, *janapya* or a district town, etc. Thus the contemporary texts not only mention different units of urban settlement but also bring out the functional variations in these units.

This raises a few questions about the nature of sources for the study of ancient Indian urban history. The literary sources used for this study suffer from certain major defects. The Sanskrit texts comprising the *Dharmasūtras*, the *Gṛhyasūtras* and the grammar of Pāṇini belong to the period between *c.* 600-300 B.C.[148] The *sūtras* reflect a grammatical freedom which is hardly conceivable after the full influence of Pāṇini,[149] whose grammar has been assigned to the middle of the 5th century B.C.[150] To the period 600-300 B.C. only the principal *Gṛhyasūtras* could be assigned.[151] Similarly of the Buddhist sources the four collections of the *suttas*, i.e., the *Dīgha*, the *Majjhima*, the *Saṁyutta* and the *Aṅguttara* together with the *Vinaya Piṭaka*, may be roughly assigned to this period.[152] The dating of the *Jātakas* is, however, not very clear. In fact, there are certain portions which are distinctly earlier than the majority of the simple stories of the first and second volumes of Fausboll's edition.[153] We have tried to use the *Jātakas* cautiously and we have used these stories generally for the post-Mauryan period; we have used them for earlier periods only when it seemed clear that the portion therein pertains to that particular period.

The *Arthaśāstra*, however, remains the main literary source for the Mauryan period (*c.* 300-200 B.C.). For dating we have followed Trautman to a certain extent.[154] Accounts of the Greek ambassador, Megasthenes, are also helpful for this period. Some of the Buddhist texts pertaining to this period have also been utilised.

The post-Mauryan period is quite rich in literary compositions. The more important amongst them are *Manusmṛti*, *Mahābhāṣya* of Patañjali, the dramas of Bhāsa together with the Buddhist texts like the *Milindapañho*, the *Divyavadāna*, the *Mahāvastu*, the *Saddharmapuṇḍarika*, the *Mānasāra*, etc. Some of the Jaina *sūtras* and the major part of the *Jātakas*, and the works of Aśvaghoṣa too have been used for this period. For the period A.D. 300-550, the *smṛtis* of Viṣṇu, Yājñavalkya, Nārada, Bṛhaspati and Kātyāyana have been used together with the works of Kālīdāsa. The major portions of the *Mahābhārata* as well as the *Rāmāyaṇa* can also be assigned to this period. The principal *purāṇas*, like the *Viṣṇu*, the *Mārkaṇḍeya*, the *Bhaviṣya*, and the *Bhāgavata* also belong to this period.

Śūdraka and Vātsyāyana are also helpful for the Gupta age, besides some other Brāhmaṇical and Buddhist texts.

The major problem with the Brāhmaṇical texts is their mutually dichotomous stand on the issue of urban life. While the *Dharmaśāstras* and the *Dharmasūtras* are decidedly in favour of a rural life, the *Arthaśāstra* and the *Kāmasūtra* are definitely pro-urban in nature and context. These attitudes only add to the problem one faces regarding the ancient texts of the period. Any proper account of urban life is impossible if one bases one's arguments solely on texts like these, especially in terms of rural-urban relationship. These texts, however, make one point clear. They poignantly bring out the rural-urban dichotomy that existed during this period. Moreover, as we shall be discussing later, it was natural for the orthodox Brāhmaṇical authors to denounce city life, a spirit which was not reflected by the more liberal authors of the *Arthaśāstra* and the *Kāmasūtra* traditions.

Even the descriptions about towns contained in the early texts are not very enlightening. The available descriptions are repetitive and conventional to the extent that every city is said to have high defensive walls with deep moats, wide streets, large city-gates, sky-touching mansions, busy markets, parks, ponds, etc. This description is almost common to both Sanskrit and Pāli texts,[155] a situation which becomes puzzling. Naturally, it seems that literature hardly conveys a realistic picture of cities. Even inscriptions of later dates are of the same nature. For example, the fifth century Mandasor inscription refers to Daśapura in the typically conventional way of the literary texts.[156] For that matter, most of the inscriptions of our period are hardly of any use for a study of urban situation. Coins, however, are more relevant for our purpose and their association with urbanism is of high significance.[157] But then coins too only help us in a limited way for because of their very nature they can hardly tell us anything about the various aspects of urbanisation.

Archaeological excavations are, however, more enlightening in terms of ancient Indian urban studies. Many of the excavated sites in various parts of the country not only provide materials for the study of urbanisation, but also illustrate the different stages of urban growth. But archaeology in India

suffers from certain major defects. To begin with, archaeology in India is secondary and comes only after literature, a situation which is quite unscientific as far as the study of ancient civilisations is concerned.[158] Unfortunately the archaeological evidence which has been unearthed in India is woefully inadequate in terms of a proper study of urban sites. The only exception seems to be Taxila, but here too not much is known of the pre-Mauryan or Mauryan city. However, the succeeding Indo-Greek city provides a fairly good idea of the layout and a few important buildings. The rest of the sites are singularly deficient in more matters than one. This situation obtains mainly because of the vertical nature of digging carried out at the sites. Naturally such excavations utterly fail to portray a full picture; archaeology of this type fails to give detailed and full picture of these sites. The limited nature of such excavations naturally makes the study of urban development more problematic. Similarly the demarcation of cultural periods as well as lack of published reports make the problem worse confounded.

All these shortcomings of the available archaeological data, however, should not detract one from the utility of excavated material for the study of urban history. Whatever might be the problems of archaeology, unlike ancient literature, it is much more reliable. It never tells a lie by itself and unlike literary texts, provides us with a set of data that can be profitably interpreted. While the personal idiosyncrasies of the author, together with social, regional and other influences, mar the credibility of a written text, archaeological finds are unbiased and unadulterated. In spite of its problems and deficiencies, it remains the best source for the study of the material aspects of a civilisation.[159]

The beginnings of urban tradition in India go back to *c.* 2350 B.C. in the Indus Valley region. The indigenous urban tradition has been, however, doubted by some archaeologists. Wheeler asserted that India received the idea of city life from Mesopotamia where it was well-established in the 3rd millennium B.C.[160] Kosambi too seems to blindly accept this view when he says, "The sudden completion...of cities which had no predecessors, which began from a dead start, points to a

stimulus that came from outside . . ."[161] This idea of an essentially West Asian nature of Harappan society has been put forth ont he basis of certain traits and items which are found at the Harappan sites. An analysis of these traits and items, however, suggests cultural contacts between the two areas rather than any "systematic colonisation" by the West Asians.

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A. Ghosh has recently tried to put forth the theory of West Asiatic origin in a more subtle way. His observations in this context may be summarised as follows : (i) there was nothing like a homogeneous Harappan population; (ii) there was no "colonisation" as such but only ideas were imported by the autochthonous folk of the Indus Valley; (iii) the idea of cities and the concept of standardising goods came from Sumeria; and (iv) all changes took place within a very short time, i.e., within a generation or two.[162] Ghosh seems to camouflage his theory of an omnipresent West Asiatic influence upon Indus Valley cities by partially emphasising the power of adaptation of the indigenous people—a theory which is basically in tune with that of Wheeler. Although Ghosh's first observation is correct, he fails to appreciate the real significance of the same. Different ethnic groups working out a pattern on the basis of foreign ideas and that too within a very short span of time would have possibly evolved different patterns for themselves. The fact that this did not happen indicates the process of evolution rather than any 'explosion'. This may partly explain the indigenous origin of the Harappan culture from the pre-Harappan peasant cultures of India, a point which goes contrary to Ghosh's second observation. Coming to his third proposition, it can be pointed out that our sources tell us an altogether different story. The most important evidence is forthcoming from the planning of Indus cities itself, for it is decidedly poles apart from its Sumerian counterpart. Similarly, if standardisation had to be quickly brought about as a result of West Asian trade the most obvious thing to do was to adopt the standards of weights and measures then obtaining in the Sumerian cities. On the contrary, weights and measures of the Harappans were distinctly indigenous in origin. Similarly, the square-cut seal, yet another mechanism of Harappan trade, was entirely different from the cylindrical seals of Mesopotamia,

Again Ghosh's assertion about an explosion of urban culture seems unwarranted. S.R. Rao, the excavator of Lothal, pointedly says that it took about a century for the local people of Lothal to adopt the new way of life and the village could not be remodelled into a town for quite some time even after the introduction of Harappan tools and weapons.[163] If it took such a long time to adopt ideas already crystallised in the Indus Valley, there is no doubt that the pre-Harappan people, contrary to Ghosh's assertions, must have taken at least a few centuries to switch over from an illiterate rural economy to a relatively higher economy of urban-industrial type. In fact, the very theory of West Asiatic origin of the Harappan cities smacks of a bias which was so assiduously propagated by the imperialist historians. To say that a higher material achievement of Indians was non-Indian in origin might have served the political purpose of the British rulers in the pre-independence era, but to repeat the same formulations even now is at once purposeless as well as unhistorical. This theory is a subtle attempt to deny what is due to indigenous culture of India.

The absence of any distinct West Asiatic influence *vis-a-vis* the origins of Harappan cities indicates the possible indigenous evolution of the Harappan civilisation. Much has been written on this subject by S. Piggott[164] and D.H. Gordon.[165] More recently W.A. Fairservis,[166] B. de Cardi,[167] J.M. Casal[168] and F.A. Khan[169] have thrown further light on the pre-historic village societies of Baluchistan, Afghanistan and the Arabian coast. Unfortunately these scholars have not yet succeeded in providing convincing material in sufficient measure to establish the distinct phases in the gradual development of these rural cultures into an urban civilisation. Nevertheless, it may be pointed out that these cultures represent a pre-Harappan phase if not a precise proto-Harappan culture and, therefore, partially explain the process of indigenous evolution of the Harappan cities. Allchins' analysis of the Amri-Nal, Kulli-Mehi, Kot-Diji and Kalibangan Cultures makes it clear that Harappan cities had an indigenous origin.[170] Here it is worthwhile to note that instead of Mesopotamian influences, Childe suggests that since Indus manufactures were imported into Sumer and Akkad, and Indus cults were actually

celebrated there,[171] this civilisation must have made direct if undefinable contributions to the cultural tradition that the West inherited through Mesopotamia.[172]

After about 600 years of existence the Harappan civilisation came to an end mainly due to the corrosion of the very basis of its technology. Other factors like the ecological changes, continuous floods and the Āryan invasion also hastened this process. Recently Fairservis has come up with an important suggestion. On the basis of the distribution map of the spread of the Harappan civilisation he points out that the Harappans flourished essentially in the wheat-growing regions of Sind, the Punjab and Gujarat. Just below Delhi, on the north-east and south of the Tapti river, begins the significant change to the great rice-growing centres suggesting that the Harappan farmers pushed to the limits of a known environment, beyond which they could not go, since their subsistence, wheat cultivation, could not effectively function [173] In this connection it may be noted that rice husks have been found in the mature and late Harappan levels of Rangpur and Lothal. Fairservis further suggests that native rice is found in Gujarat and the Punjab, and the Harappan farmers were familiar with it, though they may not have grown it; but it was experimented with until at last a successful development permitted the change from wheat to rice and the door was opened to the lower Gánga valley and to south India.[174] If this hypothesis is accepted, then this would certainly seem to be an important factor responsible for the final disappearance of the Harappan style. This theory gains more credence if one keeps in mind the rise of prosperous kingdoms in the north-eastern region after 1000 B.C., which was probably no sudden accomplishment. The rice subsistence foundation had possibly been established by descendants of the Harappan civilisation, a fact which was instrumental in providing subsistence to emerging political authorities in the north-eastern region. No doubt, this theory is based mainly on speculation, but whatever little evidence we have, points to the Harappans as the first experimenters with that crop which was to open the rest of the subcontinent to food production. Once this was achieved, the shift from the Indus plains to the Ganga valley became inevitable.

This raises the problem of the survivals of the Harappan

legacy. Ghosh, however, asserts that the Harappans failed to convey any meaning to their successors,[175] a hypothesis which has been accepted by a few other scholars also.[176] But it is difficult to imagine that the vast spread-out Harappan society and civilisation, or the various networks of systems and institutions that were present, both in the villages and towns, suddenly disappeared in some mysterious 'romantic' manner; for such a hypothesis will also have to explain the continuity, from Harappan times to our own, of the same 'physical' population composition in the regions of the Punjab, Sind and Gujarat. The very fact that the Harappan population continued to survive even without its urban manifestations tends to suggest that the Harappan elements did not disappear altogether.

In recent years archaeological excavations carried out at different sites also lend credence to the view of Harappan survivals. At Rangur in Gujarat,[177] the Harappan civilisation of the Mature Phase (IIA) gave way to a culture that was degenerate Harappan (IIB) which, in turn, seems to have developed into a phase that was transitional (Period IIC) and gave rise to a period of relative prosperity (Period III). Periods IIC and III are dated to 1100 to 1000 B.C. and 1000 to 800 B.C. respectively,[178] which indicates that the end of Rangpur virtually synchronises with the beginning of the historical period, a situation which clearly implies that the possibility of Harappan survival in the latter does not look very conjectural. Further, the Lustrous Red Ware, which originated in Period IIC and became exuberant in Period III at Rangpur, is forthcoming from Period IC at Ahar in south-western Rajasthan, from Period IV of Navadatoli in Malwa and from Period IB of Prakash in the upper Deccan, so that this cultural phase cannot be regarded as having been confined to the Gujarat corner alone. As the excavator holds that in Period IIC of Rangpur "it is only the resurgence of the Harappa culture in a new garb,"[179] and that the culture of Period III is basically Harappan,[180] the occurrence elsewhere of the characteristic pottery of the two periods, i.e., the Lustrous Red Ware, has been taken to be a result of a "mass movement (of the neo-Harappans) from the Kathiawar peninsula to central India and the Deccan".[181] The evidence of Eran in eastern Malwa is also noteworthy in this context. Here the mud rampart around the settlement is believed to have

been erected in the middle phase of the chalcolithic occupation and continued to be in use in the next period as well, dated 700 to 200 B.C.,[182] which saw iron, coins and other equipments of the early historical period.[183]

Thus the chances of the Harappan urban tradition, of course in a limited sense, filtering through certain post-Harappan cultures into northern India where historical cities sprang up around 600 B.C. cannot be completely ruled out. On the basis of the Rangpur evidence it can also be suggested that Periods IIC and III of Rangpur certainly contained Harappan elements and through those periods of Rangpur, Harappan urban tradition intruded into the rural chalcolithic cultures of Malwa and the upper Deccan, and, at least, in the case of Eran this tradition lasted long to synchronise with the urban developments in early historical India.

While the evidence of Harappan influences on the southern neolithic cultures is not very clear, the same cannot be said of the upper Ganga-Yamuna *doāb*. Here the discovery of some late Harappan sites somewhat indicates that the ochre-coloured ware,[184] which underlies the PGW levels at Hastināpura and Ahichchhatra and the intervening black-and-red ware levels at Noh and Atranjikhera, all in the *doāb* area, had in some cases a Harappan origin through the late Harappan *doāb* sites. This ware was not confined to upper Ganga valley but extended to Sutlej valley as well.[185] In fact Rao regards the whole gamut of the ochre-coloured ware as inferior Harappan[186] and suggests that the term 'OCP' should be substituted by the term 'Late Harappan' in describing the pre-PGW culture of the Sutlej valley and the Ganga-Yamuna *doāb*.[187] Ghosh, however, rejects the possibility of the ochre-coloured pottery culture having any impact on the succeeding cultures on the ground that the succeeding cultures hardly inherited anything from the former.[188] While Bargaon[189] and Ambkheri[190] evidences clearly indicate links with Harappan elements, other evidences are also forthcoming which contradict Ghosh's assertion. In this context it may be noted that the characteristic dish-on-stand, including the type with a corrugated stem, which fits in with the typical Harappan assemblage, is to be found in the 'Red ware' assemblage at Ahichchhatra. The corrugated type has also been found at Hastināpura in the PGW levels,[191] as well as in the

chalcolithic assemblages of Nagda.[192] In the case of Atranjikhara, in the PGW level, the PGW forms only 3 % to 10% of the total complex, whereas the older elements of the plain grey ware, black and red ware and the dull-red ware form the bulk of this main complex of the PGW level,[193] suggesting thereby a strong continuation of the earlier elements. Moreover, the possibility of the "Copper Hoard Culture" occupying an intermediate position between the OCP and the early Iron Age Cultures cannot altogether be ruled out.[194] Similarly on the basis of an analysis of the Kauśāmbī evidence it can be maintained, contrary to Ghosh's assertion,[195] that this site betrays some of the Harappan traits. Its early origin, its defence system, its ceramics having links with Harappan traditions,[196] all point to the inevitable conclusion that the settlement at Kauśāmbī contained distinct Harappan elements.

Without making much of the textual evidence in this context, like analysing the origin of Śiva which hardly has any connection with urbanism or "hurling of institutions from the known to the unknown", a few possibilities can be pointed out. The cultivation of rice, apparently unknown to the early Āryans, which played an important role in the second urbanisation in India was a legacy of the Harappans. Cotton too, which became an important item of trade in historical India, was not known to the early Āryans; it also seems to be a Harappan legacy. Similarly trade and commerce also seem to have been adopted from the sedentary economy of the pre-Āryans. It is common knowledge that trade and commerce are not part and parcel of migratory pastoralists, a situation quite applicable to early Āryans. Still trade continued in this period, a fact which will attest to the presence of Harappan elements in the society.[197] The support for the non-Āryan nature of trade and commerce is also forthcoming from the *Ṛgveda*, which refers with hostility to a group of non-Āryans as *Paṇis*. This name does not "seem to be Aryan, but the word left important derivatives in Sanskrit and through Sanskrit in later Indian languages. Trader, modern *baniā*, comes from the Sanskrit *vanik*, which in turn has no known origin except in *Pani*. Coin is *pana* in Sanskrit trade goods and commodities in general are *panya*. The earliest weight standards for Indian coins are exactly those of a definite class of weights at Mohenjodaro, not standards prevalent in Persia

or Mesopotamia. It would seem that some Indus people survived Āryan rapacity to continue the old traditions of trade and manufacture."[198] Here one hardly needs to emphasise the role of trade in early historical urbanisation in India. We are, however, not suggesting that all trade and commerce of the early historical period was the outcome of the Harappan impetus, for trade certainly flourished because of contemporary economic situation, but we do assert that Harappan traditions seem to have lingered on in the economic field

The above survey conclusively demonstrates that the Harappan urbanism had some links with the early historical urbanism, for the simple reason that there is a perceptible continuation from the Harappan to the later Indian cultures. The role of rice, cotton and commerce has to be viewed in this context to provide a better perspective. This is, however, not to suggest that early historical urbanisation could be possible only because of the Harappan impetus, for iron and other socio-economic formations played the most crucial role; this is only to suggest that Harappan urbanism should not be treated in complete isolation, creating a void after the disappearance of the Indus cities. We fail to understand what Ghosh means when he says that "the Indian style could not have taken its origin before the spread of 'Sanskritization', when only the Great Tradition and the Little Tradition of Indian culture met, mixed with and interacted upon each other. This process has been the keynote of Indian culture for well-nigh three millennia but could not have been possible earlier for the reason that prior to that the operation of Sanskritization had not been set in motion, nor had the Great and Little Traditions met each other."[199] Such a conclusion hardly does any credit to this great archaeologist. While talking about the process of interaction between Great and Little Traditions, initiated by the spread of Sanskritisation, Ghosh ignores a vital point. The very creation of the Great and Little Traditions goes beyond the time when this process of interaction started and it is in this context that pre-Sanskritic Cultures played a crucial role. Similarly to trace the beginnings of Indian culture from the spread of 'Sanskritisation' is like tracing the beginnings of 'Medievalism' from the coming of the Muslims. Such theories not only imply the complete domination of a culture, but also indicate the total obliteration

of the preceding culture, a situation which will seem utterly ubiquitous in the historical context. When two cultures come together, instead of the death of either of them a process of acculturation starts finally leading to the emergence of a compact culture. The Harappan influence over the succeeding cultures of India should be viewed in this perspective so that a better and more authentic result could be yielded.[200]

Before closing this discussion we may analyse the role of the PGW culture *vis-a-vis* urbanisation in early historical period. The PGW was prevalent in the first half of the 1st millennium B.C. (C_{14} determinations have given 800 to 400 B.C. as the upper and lower dates of the Ware) in of the region of the Indo-Gangetic Divide and the Upper Gangetic Valley, with a stray peripheral distribution. The distribution map of the PGW displays a migratory pattern. From Rajasthan the PGW people were forced to move eastward, resulting in the maximum spread of the Culture in the heart of India in the western *doāb* or the "Madhya Desh".[201] The importance of this culture from our point of view is enhanced as iron was coeval in the north with the PGW, as is amply evidenced at Hastināpura, Atranjikhera and Noh, all in the upper Ganga-Yamuna *doāb*, and Bairāt to its west,[202] though it is not necessary that at all these sites the earlier stage of the Ware is represented. Although the PGW culture has been generally dated to *c.* 800 B.C., a sample from Atranjikhera is dated to 1025 ± 100 B.C. though at present it stands isolated.

Iron is forthcoming from almost all these sites, like Alamgirpur, Atranjikhera, Noh and Ahichchhatra. Iron slags and ovens, discovered from Hastināpura and Atranjikhera, suggest the local smelting of iron at these places. Iron occurs with B-and-R Ware in the pre-NBP context at Chirand in Bihar and Pandu-Rajar-Dhibi and Mahisdal in West Bengal. The C_{14} method gives a fairly consistent set of dates around 700 B.C. for the Bengal and Bihar sites,[203] which is quite in tune with the date of iron forthcoming from different sites.[204] Leaving aside the various controversies it can be asserted that iron appeared in this part of the country some time in the 8th century B.C., a fact which is not completely inconsistent with

the existing literary facts either.[205]

Iron definitely played an important role in gradually changing the economy of the PGW Culture, gradual was the change because sparse yet was the use of iron in production in this early period of its discovery.[206] Iron implements, however, must have played an important role in the clearance of the primeval forest of the Ganga plains for agriculture together with the use of iron ploughshare for tilling the heavy soil of the plains, a fact attested to by contemporary later Vedic texts. Ghosh, however, tries to undermine the importance of iron in this context by arguing that the Egyptian pyramids were built of granite without the use of iron,[207] but he conveniently forgets that with five inches of rainfall and sparse vegetation Egypt did not present the same problem of clearance as the Ganga basin. Similarly Ghosh's emphasis upon clearing forests through fire as well as copper-bronze implements in order to deny iron its due share[208] is equally misleading. Even when the jungles are burnt the deep-rooted and hard-fibre *sal*, *seasum*, *mahua*, *pipal* and similar other trees growing in a comparatively high rainfall area of the middle Ganga valley would have to be cut by the iron axe, a practice obtaining even now. Similarly copper and bronze implements must have proved utterly useless in clearing the thick vegetation of eastern U.P. and Bihar, simply because softer metals could hardly cope with this task.

But due to the sparse use of iron in primary production during the PGW phase, the material equipment of these people could not be treated as rich. This is clear from the excavation, though limited, of all the sites with that Ware.[209] Yet it has certain specific elements of superiority over the Cultures immediately preceding it. The ochre-coloured pottery and the B-and-R Ware (devoid of PGW) precedes PGW stratigraphically at a majority of sites. The ochre coloured pottery, which is represented by ceramic remains, copper tools, rolled sherds and a few post-holes, is culturally very poor and the pottery itself elementary in technique and appearance.[210] The B-and-R Ware Culture which appears in pre-PGW context at sites like Atranjikhera and Noh was *also poorer in comparison to the* PGW Culture. The pottery is definitely less sophisticated as in the succeeding Culture; other finds are hardly reported.[211] Thus, the PGW Culture, with a definitely superior fabric and

form as well as paintings executed on PGW, is a definite improvement upon both the preceding cultural deposits.

One of the distinct advancements over the preceding culture was the change in the patterns of settlement during the PGW phase. Excavations at various PGW sites suggest that the Āryans no longer lived a life of nomads, but spent a well-settled life in their homes constructed with mud bricks or mud. A few plaster pieces with reed marks suggest that the "wattle-and-daub" method of constructing houses was known.[212] Rice grains, excavated at Hastināpura and Noh, and metal tools like axes and sickles, found at Atranjikhera and Noh, indicate that agriculture was making a breakthrough in this period. The ploughshare is, however, conspicuous by its absence. The literary evidences indicate that the plough was known to the Vedic Āryans[213] and by the later Vedic period it came to be made of iron.[214] But the fact that no ploughshare is forthcoming from the PGW sites might indicate that these were made of some perishable material in this period, most probably wood. This is partly corroborated by the fact that a wooden plough may not have been much of a handicap in cultivating fertile, soft, alluvial soil, deposited yearly by floods, in the land of the Saraswati, Drisadvati, Sutlej, Ganga and Yamuna. But at the same time it must be admitted that with the wooden tools in vogue for agricultural production, it was impossible to achieve a considerable breakthrough in the field of agriculture. Naturally, the period witnessed the cultivation of only a few crops to support the economy more or less on a subsistence pattern, though the production of a little surplus cannot be ruled out. This may also explain the inability of the PGW Culture to expand to the thick black soil beyond the western *doāb* which could not be cultivated with wooden tools.

The PGW people, however, possessed an advanced technological know-how in the fields of metallurgy, glass manufacturing and pottery making. Copper technology was learnt with all its complex techniques during this phase.[215] Iron implements of the PGW phase, though limited in number, also speak of an advanced technique involved in its manufacture.[216] The credit for the beginnings of glass making in India also goes to the PGW people.[217] Similarly the fabric, form as well as paintings executed on PGW together with its uniform

finish and thin section betrays a highly developed technical know-how in this field. These advancements in various technical fields certainly indicate the emergence of specialised groups in the field of production. The situation can be better understood if we analyse the commercial activities of these people. Some small objects significantly prove contacts of these people with those of other sites. The "*ghata*-shaped" beads occur from Rupar and Sardargarh in the west to Chirand and Sonpur in the east. Even from the sites of the eastern Ganga valley, where PGW is not found, this type of bead is forthcoming. These sites have also yielded almost similar types of bone points and discs. A few sherds of PGW are found at sites like Kauśāmbī, Ujjain and Vaiśālī. At Rājghāt and Chirand a few grey sherds and sherds with stroke paintings and a "*loṭā*"-shaped grey vase point to some kind of contact of these people with the PGW folk.[218] Thus, although no extensive commercial connection is indicated, a trade of restricted kind with the neighbouring places is well attested.

The above survey of the PGW Culture demonstrates that the society was moving towards a more civilised way of life. These people had already made a beginning in specialised production together with the emergence of a class of specialist craftsmen Such a social pattern, along with increased trade and commerce implying the strengthening of a mercantile community, is the usual prerequisite for urbanisation. The PGW society, however, remained a rural one in the sense that it was not yet in a position to produce sufficient agricultural surplus to sustain a developed, urban economy. This had to wait till extensive exploitation of Bihar iron ores and its large-scal application in the field of production during the succeeding NBP phase.

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rural areas become transformed into urban areas, the process through which the country comes to have towns, the process by which towns rise and grow; and urbanism is the condition that results from this process (cf. R. Bierstedt, *The Social Order*, 1970, p. 417). This distinction, besides other merits, also has a logical clarity so singularly absent in case of other distinctions and definitions.

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57. Mr. Ghosh cites the evidence at Atranjikhera in this connection, where "the Painted Grey Ware settlement is confined to the eastern side of the mound towards the river Kali. The earliest cultural deposit on the rest of the mound, with a few exceptions, belongs to the Northern Black Polished Ware phase, which lies immediately over the natural soil. So far about 650 square metres of the Painted Grey Ware occupation have been exposed, and it is presumed that the total area of the settlement of that Ware would be more than its double. Of course, much of the occupation has been washed away by the annual floods. Although the exact area of the Northern Black Polished Ware occupation has not yet been determined, it would be approximately 850 x 550 metres" ('Letter from the excavator Mr. R.C. Gaur to Mr. A. Ghosh', quoted by A. Ghosh, *op. cit.*, p. 60). Thus, Ghosh tries to prove that at Atranjikhera the NBP phase population almost doubled in comparison with that in the PGW Phase.
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102. K. Deva, 'Comments', *Purātattva*, no. 6 (1972-73), p. 33.
103. A. Ghosh, *op. cit.*, p. 28.
104. Shashi Asthana, *History and Archaeology of India's Contacts with Other Countries: From Earliest Times to 300 B.C.* (1976), p. 165 ff. This book, however, gives an impression that India's foreign trade in early historic period was quite extensive, a notion which is at once mischievous and misleading. The conclusions are mostly too far-fetched to be regarded as historical.
105. R.S. Sharma, *Light on Early Indian Society and Economy* (1966), p. 64.
106. A. Ghosh, *op. cit.*, p. 28.
107. Aśoka's Rock Edict—I.
108. T.W. Rhys Davids' contention that the *samājas* are not mentioned in priestly literature (*Buddhist India*, 1959, p. 83) is not correct.
109. *Āpastamba Dharmasūtra*, I. 1.3.12 and 1.11.32. 19; *Yājñ*, p. 84.
110. Cf. Vijay Kumar Thakur, 'Relative Position of the Brāhmaṇas and the Kṣatriyas in the Age of the Buddha', *Hindutva*, Vol. VII, no. 5 (August, 1976), pp. 16-21, 32.
111. A. Ghosh. *op. cit.*, pp. 20-21.
112. D.K. Chakrabarti, 'Concept of Urban Revolution and the Indian Context', *Purātattva*, no. 6 (1972-73), p. 31.
113. A. Ghosh, *op., cit.*, p. 20.
114. *Ibid.*, pp. 20-21.
115. *Ibid.*, p. 20.
116. G. Sjoberg, 'The Rise and Fall

of Cities : A Theoretical Perspective', *International Journal of Comparative Sociology*, Vol. 4, (1963), p. 111.

117. D.K. Chakrabarti, *op. cit.*, p. 31.
118. R.M. Adams, 'The Origin of Cities', *Scientific American*, Vol. 203, (1960), p. 153.
119. Ghosh, *op. cit.*, p. 9.
120. R.E.M. Wheeler, *Early India and Pakistan* (1959), p. 30.
121. R.S. Sharma, 'Iron and Urbanization in the Ganga Basin', *IHR*, Vol. I, no. 1 (March 1974), p. 101.
122. *Ibid.*, p. 102.
123. R.M. Adams, *The Evolution of Urban Society, Early Mesopotamia and Pre-Hispanic Mexico*, pp. 28-29.
124. M.C. Joshi even goes to the extent of suggesting that "the deciding factor in calling a particular culture as urbanised should be the existence of monetary exchange rather than any other feature, may that be script or monumental architecture. *Purātattva*, no. 6, p. 368).
125. 'The Concept of Urbanism', *Man, Settlement and Urbanism* (eds. Peter J. Ucko, R. Tringham and G.W. Dimbleby), 1972, p. 602.
126. While criticising Childe's ten indices of urbanisation, Wheatley says, "It is at once apparent that these criteria of urbanism are explicitly delineatory rather than explanatory" (*The Pivot of the Four Quarters*, 1971, p. 373).
127. R.S. Sharma considers them to be the archaeological characteristics of towns ('Decay of Gangetic Towns in Gupta and post-Gupta Times', *JIH*, Golden Jubilee Volume, pp. 135-36).
128. P.K. Acharya, *Architecture of Mānasāra* (1933), X. 39-43.
129. *Divyavadāna* (ed. P.L. Vaidya, 1959), p. 181.
130. Muni Shri Punyavijayji (ed.), *Aṅganijjā* (1957), p. 94.
131. IV. 2.
132. *Amarakośa*, II, 2, 1-2.
133. A. Ghosh, *op. cit.*, p. 45.
134. *Arthaśāstra*, II, 1-3.
135. *Ibid.*, II. 1.
136. *Ibid.*
137. *Pāṇini*, 6.2.126.
138. *Dīgha Nikāya* (eds. T.W. Rhys Davids and J.E. Carpenter, 1890-1911), II, p. 72.
139. *Milindapañho* (ed.,V. Treckner, 1880), p. 1.
140. *Amarakośa*, II. 9. 78.
141. J. Allan, *Catalogues of Indian Coins in the British Museum, Ancient India* (1936), pp. cxxvii, 214-16.
142. K.D Bajpai, 'Authority of Minting Coin in Ancient India', *JNSI*, XXV, p. 20.
143 C.A.F. Rhys Davids, *Cambridge History of India*, Vol. I. (ed. E.J. Rapson, 1962).
144. N.K. Wagle, *Society at the Time of the Buddha* (1966), p. 20.
145. U.N. Rai, *op. cit.*, pp. 19-20.
146. *Ibid.*, pp. 20-21.
147. *Arthaśāstra*, II. 1.
148. P.V. Kane (*History of Dharmaśāstra*, Vol. II, pt. I, p. xi) has assigned this period to the principal *Dharmasūtras*.
149. A.B. Keith, *Cambridge History of India*, Vol. I (ed. E.J. Rapson), p. 113.
150. V.S Agrawala, *India as known to Pāṇini* (1953), p. 475.
151. P.V. Kane, *op. cit.*, p. xi.

152. B.C. Law, *A History of Pāli Literature*, Vol. I (1933), pp. 15, 30-33.
153. T.W. Rhys Davids (*Buddhist India*, 1903, p. 207) assigns an early date to the *Jātakas*. Also see Ivor Fiser, 'The Problem of the Seṭṭhī in Buddhist, Jātakas', *Archiv Orientalani*, Vol. XXII, pp. 238-39.
154. T. Trautman, *Kautilya and the Arthaśāstra. A Statistical Investigation of the Authorship and Evolution of the Text* (1971).
155. A. Ghosh, *op. cit.*, pp. 49-50.
156. J.F. Fleet, *CII*, Vol. III (1888), pp 81-82.
157. V.K. Thakur, 'Coins and Urban Centres', *INC*, Vol. XII, pts. I-II, pp. 115-118.
158. V.K. Thakur, 'Archaeology and the Writing of Ancient Indian History', *The Journal of the Bihar Purāvid Parishad*, Vol. I, pp. 94-103.
159. Throughout this study the two words 'city' and 'town' have been used as synonyms with the full realisation that from the modern perspective this will seem to be faulty. In the modern terminology towns grow (naturally), whereas a city has a municipal government with definite boundaries and with various legal powers derived from a charter, granted by the Government. A municipality, in order to become a city, must attain a prescribed population figure. But in the present stage of our archaeological knowledge about different urban sites it is difficult to make any formulation in terms of such distinctions. Reliance on literature can lead to absurdities, mainly because archaeology has invariably cut to size the much glorified towns of literature. Keeping these considerations in mind we have not made any distinction in the use of the two terms.
160. *Five Thousand Years of Pakistan : An Archaeological Outline* (1950), p. 30.
161. *The Culture and Civilisation of Ancient India in Historical Outline* (1975), pp. 64-65.
162. *Indian Prehistory : 1964* (eds. V.N. Mishra & M.S. Mate), p. 117.
163. *Lothal and the Indus Civilization* (1973), pp. 54-55.
164. *Prehistoric India* (1950).
165. *Prehistoric Background of Indian Culture* (1958).
166. *Excavation in the Quetta Valley* (1956); *idem*, *Archaeological Surveys in the Zhob and Loralai districts* (1959); *idem*, *The Roots of Ancient India* (1971).
167. 'A New Prehistoric Ware from Baluchistan', *Iraq*, Vol. XIII, No. 2, pp. 63-75; *idem*, 'New Wares and Fresh Problems from Baluchistan', *Antiquity*, Vol. XXXIII, pp. 15-24; *idem*, 'The Bampur Sequence in the 3rd Millennium B.C.', *Antiquity*, Vol. XLI, pp. 33-41; *idem*, 'British Expedition to Kalat, 1948 and 1957', *Pakistan Archaeology*, Vol. I, pp. 20-29; *idem*, 'Excavations and Reconnaissance in Kalat, West Pakistan', *Pakistan Archaeology*, Vol. 2, pp. 86-182.
168. *Fouilles de Mundigak*, 2 Vols., *Memoires de la Delegation Archeologique Francaise en*

Afghanistan, T. XVII (1961); *idem*, *Fouilles d' Amri*, 2 Vols. (1964).

169. 'Excavations at Kot Diji', *Pakistan Archaeology*, Vol. 2, pp. 11-86.
170. B. and R. Allchin, *The Birth of Indian Civilization* (1968), p. 23.
171. V. Gordon Childe, *What Happened in History* (1960), pp. 97-98.
172. *Ibid.*, p. 129.
173. *The Roots of Ancient India*, p. 311.
174. *Ibid.*
175. *The City in Early Historical India*, p. 85.
176. Unfortunately, the Indian historiography has of recent been turned into a mud slinging mechanism in which use of such appellations as 'anti-national', 'reactionary', 'obscurantist', 'communalist', etc., are frequently used for historians belonging to differing schools of thought. In the same tradition R.S. Sharma says that any connection whatsoever between the Harappan urbanism and the early historical cities is sought to be established by those who see in the Harappa culture the beginnings of the Indian style of civilisation and also by those who ascribe it to the Āryans who are considered responsible for setting the Indian pattern of life, 'Iron and Urbanization in the Ganga Basin' (A review article based on A. Ghosh, *The City in Early Historical India*), *IHR*, Vol. I, No. 1 p. 98. Imputing motives into otherwise unmotivated historical researches is a serious thing which ought to be condemned. One wonders what Sharma has to say on the following observations of R.Thapar regarding the survivals of Harappan urban tradition even in later times, "Recent archaeological excavations have revealed a series of cultures from the later Harappan period onwards. . . , which indicate that there were survivals from the Harappa culture. Thus, whoever the Harappans were, it is to them that Indian civilisation must be traced" (*Past and Prejudice*, 1975, pp. 23-24).
177. S.R. Rao, 'Excavation at Rangpur and Other Explorations in Gujarat', *AI*, nos. 18-19, pp. 4-207.
178. *Ibid.*, p. 27.
179. *Ibid* ,, p. 23.
180. *Ibid.*, p. 25.
181. *Ibid* , p. 19.
182. K.D. Bajpai, *Sagar Through the Ages* (1964); *IAR*, *1961-62*, p. 24; *1962-63*, p. 11; *1963-64*, p. 15.
183. In this context it may be mentioned that the Harappan citadel fortification at Surakotda in Kutch also continued in the post-Harappan period, see J.P. Joshi, *Archaeological Congress and Seminar Papers* (ed. S.B. Deo, 1972), p. 26n.
184. For the nomenclature, etc., of this ware, see 'Proceedings of the Seminar on OCP & NBP', *Purātattva*, no. 5, pp. 5-28.
185. K.N. Dixit, 'Explorations along the Right Bank of River Sutlej in Punjab', *JIH*, Vol. XLV, pt. II, pp. 561-68.
186. S.R. Rao, *Presidential Address to the Karnataka Historical*

Research Society (1970), p. 4.

187. *Idem, Lothal and the Indus Civilization*, p. 183.
188. *Op. cit.*, p. 80.
189. M.N. Deshpande, *Indian Prehistory: 1964* (eds. V.N. Mishra & M.S. Mate), p. 128.
190. S R. Rao, *op. cit.*, p. 183.
191. N.R. Banerjee, *The Iron Age in India* (1965) p. 141.
192. *Ibid.*
193. R.C. Gaur, 'Comment' on A. Ghosh, 'Indus Civil zation : Its Origins, Authors, Extent and Chronology', *Indian Prehistory : 1964* (eds. V.N. Mishra and M.S. Mate), p. 144.
194. B. and R. Allchin, *op. cit.*, p. 200.
195. *Op. cit.*, p. 81.
196. G.R. Sharma, *Excavations at Kauśāmbī, 1949-50*, pp. xiv-xxi; *idem, The Excavaiions at Kauśāmbī, 1957-59.*
197. Cf. S. Asthana, *History and Archaeology of India's Contacts with Other Countries : From Earliest Times to 300 B.C.* (1975). This book, however, gives an impression that india's foreign trade in the Vedic period was quite extensive, a notion which is not based on very sound grounds.
198. D.D. Kosambi, *The Culture and Civilisation of Ancient India in Historical Outline* (1975), p. 80.
199. *Op. cit.*, p. 85.
200. The recent discoveries at Bhura (district Muzaffarnagar, U.P.) give a clear indication of the continuity of the Harappan culture down to the historical times. The site has yielded, apart from thet ypical Harappan pottery, PGW and sherds of the red ware of the Śuṅga-Kuṣāṇa period (*IAR, 1968-69*, p. 70).
201. A look at the distribution map of PGW indicates that the maximum number of sites are in the western U.P., this is followed by the Punjab and Haryana, while Rajasthan has the least number of sites. That this picture may be changed after further exploration cannot be ruled out, see V. Tripathi, *The Painted Grey Ware : An Iron Age Culture of Northern India* (1976), pp. 21-39.
202. N.R. Banerjee, *op. cit.*, p. 216.
203. Cf. D.P. Agrawal and S. Kusumgar, *Prehistoric Chronology and Radiocarbon Dating in India* (1974).
204. The date and mechanism of the introduction of iron is not very certain in spite of recent works on the subject. In this context I have particularly in mind N.R. Banerjee, *op. cit.*
205. Cf. R.S. Sharma, 'Class Formation and its Material Basis in the Upper Gangetic Basin (*c.* 1000-500 B.C.)', *IHR*, Vol. II, no. 1, pp. 1-2.
206. *Ibid.*, p. 2.
207. A. Ghosh, *op. cit.*, p. 7.
208. *Ibid.*, pp. 8-9.
209. For a detailed analysis of the different aspects of this ware, including the various sites of its occurrence and assemblage, see V. Tripathi, *op. cit.*, pp. 8-117, 124-131.
210. R.C. Gaur, *Purātattva*, no. 5, pp. 10-11; B.B. Lal, *Purātattva*, no. 5, pp. 56-59.
211. V. Tripathi, *op. cit.*, p. 116.
212. *Ibid.*, p. 113.
213. *Rgveda*, VI. 20, 19; *Atharvaveda*, III, 16, 3.

214. References to ploughs to which six or twelve were yoked (*Taittirīya Saṁhitā*, V, 2.5) and to six or eight yokes (*Atharva-veda Saṁhitā*, VI, 19.1. and VIII, 9.16) which would require twelve or sixteen oxen indicate the use of iron ploughshare.

215. V. Tripathi, *op. cit.*, pp. 107-09.

216. *Ibid.*, pp. 104-08.

217. *Ibid.*., pp. 109.10.

218. *Ibid.*, p. 113.

2

Causative Factors

URBAN development is a complex process defying any simple and isolationist explanation. As it was the epitome of a society advancing towards more civilised way of life, it can be studied and viewed properly only in a total societal framework. Any explanation of this emerging pattern becomes lopsided if one or the other aspect of its growth is over-emphasised at the cost of other equally relevant factors. An analysis of the nature of urbanisation in the ancient context[1] clearly brings forward this error in approach committed by the scholars of diverse disciplines. It appears that while some scholars consider the social factor as responsible for urban growth, others give the same place either to economic or political factors. We do not suggest that these factors were meaningless in the context of urban development, but we assert that none of the three was independently sufficient enough to transform a rural settlement into an urban centre. An isolated factor is simply incapable of giving

birth to a system/organisation/institution which encompasses within its orbit and, in turn, affects the whole societal system whether social, economic or political. In this context it may be pointed out that unless the farmers produced surplus, the political system which thrives on the taxes derived from the farmers could not exist. Similarly, in the absence of an authority which will look after the channelling of surplus from the villages into the towns, the towns will have a precarious existence; this lack of authority may also lead to chaos and anarchy leading not only to the shattering of the distributive system but also to the harming of agriculture which will mean less surplus or no surplus at all. Likewise, in the absence of the mercantile class, the transfer of surplus from one place to another may become almost impossible, leading to economic stagnation and degeneration of towns. Thus each of the elements—economic, social and political—played an important role in the growth and sustenance of towns. This is, however, not to deny the primacy of economic element in the shape of technological advancement and the resultant surplus; the social and political superstructure is not only the resultant of the surplus but is also sustained by this essential economic ingredient of the city. Thus a discussion of the causative factors of urban growth, while necessarily emphasising the economic element, should include within its purview all the possible aiding factors for its growth. This will include, besides the economic, social and political causes, such factors like geographical and religious ones also, as these certainly influenced the course of urbanisation in ancient India.

An analysis of urban centres brings to the fore an important aspect connected with their respective origins. All the urban centres were not the result of one single set of causes; most of them originated in diverse circumstances and due to specific causes. The primary factors like the existence of a surplus and a distributive machinery representing both the traders and administrators were, no doubt, common to all of them. But they derived their rationale for existence from such diverse causes as religion, marketing, etc.; some of the towns were religious centres, some were educational centres, some were trade centres, some were centres of administration, and so on. This is not to suggest that these towns were unnatural and had

only one function to perform, rather evidences are forthcoming to suggest that there were numerous towns performing more than one function at the same time.

Some of the important causative factors which seem to have influenced urban growth were as follows:

(i) an increased food supply;
(ii) increase in population and/or rural unemployment;
(iii) craft specialisation;
(iv) marketing and trade;
(v) social stratification;
(vi) religion;
(vii) secular tourism;
(viii) education;
(ix) landlords;
(x) retainers;
(xi) administration;
(xii) defence;[2]
(xiii) warfare;
(xiv) irrigation;[3]
(iv) geographical location;
(xvi) individual initiative.

(i) The very existence of an urban community presupposes the existence of surplus food production. Cities can emerge precisely at the moment when the agriculturists start producing a surplus that can sustain the basically non-productive urban residents. The production of this surplus depends on the technological know-how of the people. A technologically more advanced people by extending their knowledge to the field of agriculture can certainly produce a sizable amount of surplus. Bruce Trigger points out that among some urban groups a *considerable amount of food is produced by the inhabitants of* the city working on either full-time or part-time basis in the surrounding countryside,[4] a situation which hardly seems applicable to the early historical Indian urban context. Moreover, he seems to forget that a full-time agriculturist is not a member of the urban economic system. The very profession of agriculture indicates not only its rurality but also its relevance in the rural economic context. The town, in fact, was never

engaged in food production, but devoted its time to such economic pursuits as crafts, industries and trade. The town generally purchased its food from farmers in return for manufactured goods and professional services. This system of mutual exchange enabled the farmers to get manufactured articles of daily use, agricultural implements and other necessary items in return for sale of grains to townsfolk. The history of towns in the ancient world, however, suggests that this was not the only kind of method through which cities could acquire the required food; instances of forcible collection of food in an exploitative manner are also forthcoming. Thus, the government officials, soldiers, landlords and skilled artisans who inhabited the traditional Chinese administrative towns produced few goods for sale in the villages but were sustained by food expropriated from there as rent or taxes.[5] A similar situation prevailed in such ancient Indian urban centres which were basically camp towns.

The question of increasing food supply also brings into focus the problem of hinterland from where food came to the cities. In the ancient societies there was always a tendency to produce foodstuff as near as possible to the place where it was to be consumed, mainly because of the cost and labour involved in transporting this stuff from a faraway place. As a result of these limitations of production and transportation, cities of large size and enormous population could not develop in the ancient world. Under certain circumstances, like the growth of empires, transportation becomes less costly and less restrictive thereby removing a secure impediment on urban growth. This might explain why under the Mauryas, and more so under the Kuṣāṇas, the urban movement made rapid strides in ancient India.

(ii) All cities, irrespective of their size, population and geographical area of location, depend on certain external forces, like a non-urban population supplying food and raw materials and, in turn, consuming the goods and services offered by the city. This might imply that denser the overall population within the limits of effective agricultural production, the more urban centres it can support. Mathematically it will roughly mean: agricultural population density $\propto$ number of towns.

It will, however, be a mistake to believe in the absoluteness of this seemingly scientific relationship. Extent of urbanisation

in quite a number of cases shows no unvarying or constant relationship with population density. Thus, the Ibo did not achieve the urban status, although their total population was about the same as that of the urbanised Yoruba and their population density about double. There are other instances to show that cities can also grow in areas with low population densities. Trade cities of Petra and Palmyra, for instance, originated in the desert and Karakorum, supported by an imperial tributary system, developed in a predominantly pastoral region.[6] Here it must be noted that cities quite distant from their hinterland can survive only with a developed system of transportation, preferably under some imperial aegis. Moreover, cities of all types have to depend ultimately upon regions that are more densely populated.

As the city grows its population increases. The increase in population is mainly due to the process of rural-urban migration initiated by the emergence of towns. Although in pre-industrial societies this migration was never very sharp and sizable, it certainly was capable enough to increase the urban population. The main reason for this migration was economic. An increasing number of population, which had no land of their own in the villages, began to migrate to industrial and commercial areas to work as apprentices in various crafts and industries as well as urban labourers. Moreover, the lure for towns has always been great in the countryside, a factor that might have been yet another impetus for these migrations. Our contemporary sources too corroborate this development. The *Jātakas* are replete with such stories where many apprentices, some of them definitely belonging to the rural areas, were employed to impart them training of varied crafts and industries.[7] This not only helped to solve the problem of rural unemployment but also promoted the growth of industries and crafts and catalysed the process of urbanisation. Thus, cities also came to act as an outlet for surplus rural population.

(iii) The urban economy has its two main constituents: trade and handicraft production. Even for a developed system of trade, handicraft production was a necessity. The craftsmen produced a variety of articles which formed important items of trade in the contemporary world. So important an urban activity was handicraft production that many of the cities of the

ancient world not only derived their rationale but also earned their food from it. Here it may be emphasised that the nature of manufacturing in urban centres is primarily based on the principle of craft specialisation and division of labour. This was certainly a complex system of production necessitating much coordination through an organisation. This coordination and organisation in the ancient Indian urban context was achieved by the various craft guilds. Artisans and craftsmen, in order to protect their common interests, began to unite in various guilds which looked after their respective crafts. The guilds not only ensured the supply of raw materials to their respective members but also looked after the consumption of finished goods and their profits to artisans. These guilds, because of their distinct service to urban economy, became very important as well as powerful in due course. The king not only protected these guilds but, at the same time, avoided any interference in their affairs. The power and prestige of such guilds can be gauged from the fact that in the post-Mauryan times different guilds became autonomous administering authority in about a dozen towns.[8] The guilds, therefore, by organising urban production not only helped the growth of specialised crafts but also played a crucial role in the development of more towns.

(iv) Trade and market play a crucial role in the development of towns. Its importance can be understood from the fact that it has been regarded by some as the most important determinant for urban growth. Despite this emphasis placed on trade as a primary motivating force in the generation of urban forms, it has yet to be demonstrated clearly and unequivocally that a generalised desire for exchange is capable of concentrating political and social power to the extent attested to by the archaeological records, and that it can bring about the institutionalisation of such power. This might indicate the limitations of trade *vis-a-vis* urban growth. This is, however, not to deny the important role played by trade in the crystallisation of towns. In a sense, it can be suggested that urban economy was sustained by trade. This is indicated by, and in turn explains, the growth of power and prestige of the mercantile community in the urban setting.

In fact, the very growth in specialised production entails the necessity of a mechanism of distribution. This need for a vast

network of distributive system naturally leads to development of trade. As the urban societies basically depend on the rural countryside for their existence, trade has to be extended to these areas. The exchange of foodstuff for finished urban goods is a basic criterion of this system which tends to serve both the urban producers and the rural agriculturists. Thus trade in this context becomes some sort of a link between two distinct systems of production—rural and urban—each one of them, in turn, being supported by the other through the intermediation of traders and merchants. The existence of such trade is attested to by the occurrence of periodical *hāṭas* in the rural countryside together with the peddlers going with the urban finished goods from one place to another.

The area of rural-urban trade is, however, limited in the sense that an urban centre carries such trade generally with the neighbouring countryside only. As far as long distance internal trade was concerned, it was generally centred in the towns because they were centres of production and offered greater security and protection. Another dimension of trade was provided by its foreign connections. In both cases such trade was singularly helpful in the growth of towns in various parts of the world. Take, for instance, the cities of the Levant. These citiee flourished as trading centres, first between Mesopotamia and Egypt and later between the Mediterranean regions and the farthest east.[9] Similar instances can be multiplied to prove the causative role of trade in the emergence of towns especially in areas which lay on the trade-routes or ports from where trade was carried on.[10] Thus, as long as overland trade continued to be conducted from Tāmralipti, it remained a prosperous town, but once this trade virtually stopped in the 7th century A D. the city lost its urban status.

There is yet another aspect of production and distribution obtaining in urban society. There are instances of craftsmen and artisans being attached to the royal court or to such institutions like temple and army. Naturally, in these cases the organisation of production as well as its distribution is in the hands of a non-producing and non-trading class. But such emergence of major sub-systems within the economy helps urban development in its own way. Such a system, because of its concern for storage, transportation and keeping accounts, leads

to the rise of a typically urban group of specialists directly connected with the various manifestations of urban society.

(v) Allied with the importance of crafts and trade for urban growth was the emergence of social stratification. The significance of social stratification in the urban context can be appreciated from the fact that the very basis of urbanisation was the division of society into two distinct groups : producers and exploiters of production. A new group of tertiaries also emerged which came to align itself with the exploiters of producers. In fact, the very nature of urban culture makes it apparent that class/caste division was acute in this society. The very sophistication of urban culture underlines the necessity of leisure—a product of a class/caste society.[11] Moreover, town planning, urban economy, etc., indicate the emergence of distinct groups/classes having virtually fixed positions on the social ladder. That these various groups/classes performed socio-economically relevant duties in the urban context is beyond doubt. This might explain their importance in the urban milieu. The specialisation of functions *pari passu* the hardening of social stratification was an important factor which not only aided urban growth but, in turn, also supported the very edifice of urban society—its economy, its administration and its planning. Without social stratification, which helps urbanism, and in turn gets aid from it, urbanisation would have remained a far cry or its nature would have been quite different.

(vi) Religion is an important causative factor for the growth of towns. Theological considerations, no doubt, lead to the emergence of religious institutions in villages, but the more important religious establishments are generally situated in urban centres. A noteworthy point in that context is the situation of larger temples often in the centre of the town, thus "expressing in spatial terms the theological rationalization of the unity of the city of state".[12] Kauṭilya provides that the temple and the sacrificial places should be immediately to the east of the royal palace which is in the midst of the city.[13] Besides the centrally located temple, the cities also had subsidiary cult centres located in respective quarters of the city. Temples played a crucial role in urban economy by supporting a considerable number of priests, clerks, and

artisans and labourers who otherwise would have remained unemployed. Thus, temples were an important employment agency, next only to the state. Many a city in ancient India, earlier as centres of Buddhist religion and more precisely from Gupta times as Brāhmaṇical cult centres, derived the rationale for their existence mainly from their religious significance.

That religious pilgrimage played a crucial role in the development of such towns is beyond doubt. In early phases of ancient India almost all the places intimately connected with Jainism, and more so with Buddhism, came to be regarded as sacred, leading to the congregation of a large number of devotees to such places. Thus most of the places associated with early Jainism and Buddhism, e.g., Kuśīnārā, Kapilavastu, Sārnath, Śrāvasti, Vaiśālī, etc., became important urban centres. From the Gupta times, the number of such towns increased. Older towns like Mathurā, which was revered by the Buddhists and the Jainas in the earlier days, came to be increasingly associated with Brāhmaṇical cults, while Brāhmaṇical temples of important deities built in newer settlements sought to give them an urban nature because of the number of pilgrims that such centres attracted. In a slightly different context we can note the *Mahābhārata's* description of the building of a city for purposes of the celebration of the *Rajasūya* sacrifice.[14]

These religious urban centres played a distinct role in the urban system. The ceremonial centres functioned precisely as instruments/centres for the dissemination of urban ideas through all levels of society. As these were the centres of worship, people from different areas congregated here and when they left for their homes they carried along with them the ideas of systems and styles of life different from their own. In this sense these religious centres played the role of centres from where urban ethos and ideas could be diffused to various areas of the country. Thus, religion not only led to the emergence of certain urban centres, but by diffusing the urban tradition far and wide it was also helping, in a sense, the emergence of newer urban areas. People with rural tradition by getting themselves familiarised with urban spirit at such religious centres might have tried to introduce the same in their own respective areas.

(vii) Secular tourism is also regarded as a factor facilitating the growth of towns. Inns, rest houses or *sarāis* either officially managed or constructed by private or philanthropic agencies provided accommodation for travelling merchants and government officials and also for the individual travelling for pleasure. Although the establishment of such towns in the Roman and British contexts cannot be ruled out,[15] the same cannot be said about ancient India. As these resting places were generally situated on the main roads, generally near the towns, they must have acted as ancillary units of the town. It can be postulated that, in due course, around these places shops of different kinds might have cropped up to cater to the needs of the travellers. Along with shop-keepers, there might have assembled certain creftsmen to sell their products to these travellers. As the place gradually gained in population, and subsequently importance, it might have necessitated the emergence of an administrative organisation. The argument can be further elaborated to indicate that such places gradually attained the manifestations of urbanism. Though we do not precisely suggest that any particular city of our period was the outcome of such a situation, an altogether new approach to the rationale behind the emergence of such towns which are near to any important urban centre might enlighten us on this point. Take, for instance, the geographical location of Chirand. It might have proved to be a convenient resting place for travellers coming from the directions of Vaiśālī and going towards Pāṭaliputra or beyond.

(viii) Education too played a crucial role in the emergence of certain towns. Sometimes educational institutions of high repute became important urban centres. Talking about Taxila, the Buddhist sources specifically mention that this city was primarily important for its intellectual attributes. Students from faraway places used to come to this place for prosecuting their studies. Even members of the royal family used to come to this place without caring for the hazardous journey involved.[16] The princes of Kāśī were probably educated here.[17] Probably Pāṇini and Kauṭilya were also the students of this university.[18] Students from such faraway places, like Rājagṛha,[19] Ujjayinī[20] and Mithilā,[21] used to come here. Sārnath, though not comparable to Taxila, attained fame as a centre of learning.[22] Banaras

too seems to have been an important centre of education.[23] As excavations have revealed, later on Nālandā and Vikramaśilā also emerged as important urban educational centres. These two towns were different from earlier centres of education in the sense that they were typically university towns. While Taxila, Sārnath, Banaras, etc., had also to perform other important functions, the towns of Nālandā and Vikramaśilā were only catering to the intellectual needs of society. Whereas these two latter-day towns derived their rationale from being mere educational centres, in the case of other towns educational institutions, more precisely, acted as another source of population.

(ix) The growth and sustenance of towns in ancient India was also aided by the landlords or big agricultural magnates, who, although basically attached to land, preferred to live in towns because of the easy-going and luxurious life of the urban centres. These landlords, to a great extent, controlled the economy of the villages and thereby also exercised significant control over the urban economic set-up. In villages farming was done on their behalf by their subordinates who earned money through cultivation and sent it to their masters residing in towns. In their turn these 'absentee' landlords partially invested their money in trade and industry and partially spent it over the luxuries of urban life. Thus, these persons were enjoying the best of both worlds—having a decisive role in the rural economy and trying to have a stronghold in the urban economic system as well. The *Jātakas* often refer to rich merchants going to villages to collect revenues from their estates. Bruce Trigger suggests that agricultural magnates lived in towns which were garrisoned and thus offered protection to their lives and property against peasant uprisings, as was the case in ancient China.[24] This observation does not seem to be completely out of place in the Indian context as well, although its applicability seems to be only partial. It is true that instances of peasant uprisings are not numerous in our period, rather there is hardly an instance of this type related in our sources, yet a situation of this type can be inferred. For instance, a land charter of the middle of the 6th century A.D. lays down that the grant should be protected from the apparent threat to it, a situation which

becomes obvious from the phrase *śūdrakare(a)drakṣu(a)ṇaḥ* used there.[25] Thus danger to the grant was apprehended from below;[26] a similar situation obtaining in the earlier period seems quite logical. At the same time it must be asserted that in the Indian context this certainly would not have been a serious cause to warrant the residence of landlords within the city walls, the love for luxury and the sophistication of urban life would have acted as greater inducements.

(x) The retainers also provided a great stimulus to the development of towns. The social system of towns is such that it leads to the emergence of a number of people whose sole function is to offer personal services to other people. Some of these, like garland-makers, barbers, etc., are of utilitarian nature, but most of them are less utilitarian, rather non-utilitarian, and they became a part and parcel of the luxurious ways and conspicuous consumption of the wealthy and powerful. Consequently this tertiary group, including cooks, household servants, personal attendants, bards, acrobats, singers, etc.,[27] swelled the urban population. The size of this group basically depended on the general prosperity of the town and hence they were found in larger numbers in capitals and cities whose economy was swollen by conquest. Here it must be underlined that the people belonging to this group were found in smaller numbers in towns which were typically mercantile or economic in nature irrespective of their prosperity. This situation is almost self-explanatory. The tertiary group, which was basically a parasite *vis-a-vis* urban economy, would thrive only at such centres where the prosperity was not a result of the typical urban economy, rather where it was a result of forced expropriation either in the capitals or in the towns made prosperous through war-booty.

(xi) Administrative compulsions also led to the growth of towns in ancient India. In fact, there are scholars who believe that the prime motivating factor for the growth of urban centres is the existence of a political system including the ruler, a bureaucracy and a coercive system. This explanation, partly emanating from the lopsided analysis of sociologists like Gideon Sjoberg and Mumford and partly influenced by the undue bias for politics in historical researches, makes a caricature of a major historical development. To say that political

power compelled the people to contribute their surplus is misleading as well as unwarranted, for the very sustenance of a political system presupposes the existence of a surplus. This is, however, not to deny that political power did contribute to the urban process by looking after the proper channelling of surplus and, side by side, transforming such settlements into urban centres where it established itself.

From the later Vedic age, which roughly corresponds with the PGW culture, as the socio-economic structure made a transition from pastoralism to territorialism and states of a new type emerged, many royal officers came to be appointed mainly to collect the king's share in the revenue, and for the maintenance of law and order. These officers generally resided with the kings at the capitals. The number of such officers increased further with the establishment of large territorial states around 6th century B.C. Most of them lived in capitals and controlled the administration of the empire. Thus capitals became more important and grew into cities. With the growth of empires, political centres, other than capitals, also emerged as prosperous urban centres These cities served as centres of administration for larger political units within the empire. Thus, almost all the seats of any consequential administrative power emerged as urban centres in ancient India.

(xii) An important aiding factor in the development of towns was the city defence system. The need for defending cities, especially those which were seats of royal power, required an army and a group of specialised persons to dig canals and moats, erect ramparts, etc. Throughout ancient India, important cities were surrounded by walls which protected them against attacks and political coercion or made them strong enough to dominate the surrounding countryside. In some cases the different areas of a city were separated by cross-walls each provided with a single-leaf door that would be closed at night, as can be evinced from the remains of Sub-period VI at Kauśāmbī.[28] Thus walls were erected not only as defences against external dangers but also to protect the city against internal disorder and brigandage. All persons connected with defence work permanently resided within the city walls and were employed by the state. They became regular and permanent feature of cities and the growth in their number meant

the growth of cities. Large states at times sought to protect their frontiers with complex systems of fortifications, an arrangement which gave rise to urban centres by supporting several towns which functioned as supply centres, as in the case of Britain.[29] In our context, it can be probably asserted that this latter factor very marginally accounted for the growth of towns.

(xiii) Warfare has been regarded as one of the important activities helping urban transformation. One of the favourite themes of the early urbanists had been the notion of the early city as an archetypal fortress, the refuge within whose protecting walls leading to the constraints of mutual proximity combined together with the imperatives of war to restructure simple aggregations of tribesmen into class-oriented, territorially based politics which made the urban transformation possible.[30] This theory, which ascribes to war a primary causative role in urban genesis, must be put in a proper historical perspective by emphasising that organised and sustained conflict could have played only a limited, sporadic and unrepresentative role so long as power and authority were diffused broadly through pre-urban society. Institutionalised warfare would seem to have been a result rather than a cause of the emergence of loci of socio-economic and political power, a point which even Mumford seems to admit[31] despite his too much reliance on war as a generator of urbanism. This is not to deny that organised warfare may often have made a significant contribution to the intensification of urban development by inducing a concentration of settlement for purposes of defence, as the Phoenicians gathered their population into a single city, Megalopolis, in order to resist the threat of conquest by the Lacedaemonians. From this source sprang the elaborate system of fortifications, with walls, ramparts, towers, canals, moats, that characterised the chief cities of our period. But by taking this very argument, that city was associated with the engines of destruction, to its logical end it can be argued that as soon as war became one of the reasons for the city's existence, the city's own wealth made it a natural traget; the agent of growth became the agent of destruction. Thus, those who, like Mumford, assign organised warfare a primary role in the emergence of cities should at once admit that war was also the prime cause

responsible for the city's destruction.

(xiv) Some scholars suggest that irrigation too played an important role in the growth of towns. This has been suggested by those who regard power as the main proto-urban criterion which ultimately led to the genesis of urban centres. This view might suggest that irrigation, on the one hand, leads to better production and more surplus, while, on the other hand, it will lead to better control over the countryside by the king. Through this more effective control in the way of providing irrigational facilities, the king can expropriate a larger amount of surplus thereby strengthening the urban growth. This theory suffers from misplaced emphasis. Large-scale hydraulic undertakings, like organised warfare, would seem to have been a product rather than a cause of the emergence of political power as well as the urban situation. In the pre-urban societies either irrigation was unknown or even if it was known its purview was too small either to generate or contribute to such a complex development as a city is. Moreover, in the ancient Indian society irrigation did not probably form the main base for royal authority or despotism and the king also probably did not try to control the lives of his citizens through state-sponsored irrigational facilities. In the light of the above discussion we are left with no choice but to deny irrigation the role of an autonomous causative factor in the emergence of primary urban forms. At best, because of its limited role in the production of surplus, it could have been but a minor component in an extremely intricate network of causes and effects.

(xv) The geographical system of an area also plays a crucial role in the emergence of urban centres. This can be better understood in terms of the rainfall of the area, its fertility, availability of agricultural land, scope for natural irrigation as well as natural fortification. In ancient times, when transportation system was not either efficient or easy, cities depended for their survival on the neighbouring hinterland. This might explain how the fertility, etc., of a region becomes decisive in the context of urban growth.

The significance of geographical location can also be appreciated from yet another angle. In ancient India, there were two important categories of towns—political and economic. In the present context we are more concerned with the

latter type. There were obvious reasons for the growth of such towns—they were trade centres, some of them grew as a result of their location on important trade-routes. There are yet other towns which assumed urban status because of their geographical location. In this category we may place the coastal towns, called *paṭṭana* in our sources. Another place, which became an urban centre, mainly because of its geographical location, was the area situated on the mouth of a river. This type of urban centre has been referred to as *droṇamakha* in our ancient texts. Thus, it can be suggested that there were urban centres, though economic in nature, whose *raison d'etre* for existence was basically its geographical location.

(xvi) There were certain urban centres which were established by individual initiative, the individual invariably being the king. Our literary sources will like us to believe that almost all the important urban centres of our period were established by one mythical person or the other and they were named after their founders.[32] At best, these traditions simply indicate a probable method of naming the cities. The tradition about Alexander the Great having inspired the rearing up of a chain of cities in the Punjab, Sind and the north-west frontier areas that came to bear his name, seems to be more historical. Similarly the Kuṣāṇa kings Kaṇiṣka and Huviṣka are credited with founding the towns of Kaṇiṣkapur and Huṣkapur respectively. Thus, it seems that kings at times founded towns at their personal initiative too, though the number of such towns was apparently very low.

The above survey indicates that urban growth cannot be explained by a single factor; there were various determinants of urban growth in ancient Indian society. Another important point that emerges from this discussion is the differing rationale for the growth of different towns. But here it should be emphasised that even cities founded for diametrically opposite reasons tend to grow structurally similar as they increase in size. This will imply that cities of any particular region. despite their different functional basis, will tend to have a somewhat similar socio-economic pattern together with a somewhat uniform urban culture.

The emergence of towns in early historical India roughly synchronises with the beginnings of the NBP Culture. The NBP

started appearing at north Indian sites from the 6th century B.C., although at some sites of the area it has a somewhat later origin. Among the sites where NBP has a definitely earlier datable context are Rājagṛha, Vaiśālī, Chirand, Sonpur, Rājghāt, Śrāvasti, Kauśāmbī and Taxila. Sites like Hastināpura, Charsada, Kumrahar and perhaps Ropar and Ujjain belong to a later date bracket (c. 350-150 B C.).[33] A point that may be emphasised here is the fact that evidence from Śrāvasti and Ahichchhatra, and in an indirect way from Atranjikhera and Alamgirpur, clearly points to a stage of overlap between the PGW and NBP phases.[34] This situation is further borne out by the common red ware shapes that are associated with the NBP at the eastern sites and with the PGW in the western *doāb*.[35] This suggests that there was no break between these two cultures; the stage set for urban revival by the PGW people was very ably exploited by the NBP people to initiate the process of second urbanisation in ancient India. 166845

Besides the differences in their cermaic industry, the basic point of departure, which really mattered in the emergence of highly differing material make-up of the PGW and NBP peoples, was the nature of their association with iron. Iron weapons have been discovered from a fairly large area in the PGW context. But the fact that so far very few iron tools belonging to this phase are forthcoming suggests that at this stage iron did not contribute to the development of handicrafts or agriculture. Most of the iron implements from the PGW levels comprise arrow-heads and spear-heads [36] Thus, while at the dawn of the first millennium B.C. people elsewhere began to use iron widely both in the contexts of war and peace,[37] Indian society had yet to fully comprehend the socio-economic implications of the use of this metal. However it cannot be ruled out that at this stage iron may have been used for clearance,[38] and some other productionwise unimportant activities. Naturally, the PGW people had to settle for a subsistence economy, for without the use of iron agricultural implements they could not introduce agrarian innovations on a scale where it could be termed as a food-producing economy. Here it may be pointed out that although in the first phase of its use iron could not be extended to production possibly because of its paucity[39] and primitive technology, it may have helped the

organisers of production in making their authority felt over the producers thereby strengthening the stratification of society in terms of producers and exploiters.[40]

This situation is basically different in the succeeding NBP phase. In this phase we encounter more agricultural implements, substantial enough in number[41] to suggest the real beginnings of iron age in India in the context of socio-economic changes generally associated with the use of this metal This was the period which first of all felt the impact of iron technology on the productive system. The whole productive system seems to have been revolutionised and from now onwards, for quite a long time, economic changes were relatively rapid. That the NBP phase had an improved iron technology is reflected in the black polished colour of the slip of the NBP. It was the result of the black magnetic oxide through a particular firing process.[42]

This growing knowledge of iron coupled with its advanced technology was bound to have consequential impact on the contemporary society. The use of iron in the field of production was, however, facilitated by the use of bellows. Although in one text it has been mentioned by way of simile that a ploughshare was heated through the whole day, implying thereby the absence of the use of bellows, several texts of the period, including *Aṣṭādhyāyī*[43] and *Uvasagadasāo*,[44] attest to the use of bellows. The significance of the use of bellows cannot be ignored. The device by quickly heating up iron could quicken the speed of the production of finished iron objects. Thus, it became instrumental in large-scale production of iron tools and implements, thereby making possible the diffusion of these articles in the rural areas in a relatively big way. The process was further hastened by the fact that now rich iron-ore mines could be easily explored. One such place was Rājagṛha. The hills near this city have the northernmost Dhārwār outcrop, a geological formation in which iron is rather handily available. Flakes of iron oxide can be found there as considerable encrustations and they can be scraped off the rock with hardly any mining, reduced by charcoal fire, and then used for making tools, etc.[45] Moreover beyond Gaya, lying south-east to Rājagṛha, too, the richest iron deposits exist in the hills. This deposit also came to be exploited; the ore was mined, reduced

on the spot and then brought to the cities. Thus, in comparison with the PGW phase, the NBP period witnessed an improvement in iron technology as well as discovered some of the best mines of the metal where mining was quite easy. This may partially explain the changed situation in the NBP phase *vis-a-vis* the PGW period.

The easy availability of iron coupled with a developed technology leading to its widespread use hastened the process of clearing forests for converting them into arable land in the Gangetic basin. The limited availability of iron during the PGW phase was a great hindrance to this process which was so essential for development of agriculture. The clearing of forests not only made available large tracts of barren field for cultivation but also ensured the supply of timber in large quantities. This explains why timber came to be increasingly used for house construction in the early historical period. Together with the availability of larger tracts for cultivation, iron tools and implements came to be widely used for agricultural purposes, thereby providing a great impetus to agriculture as a whole. The literary texts of the period indicate that various kinds of rice, known as *śāli*, and sugarcane came to be increasingly cultivated. The cultivation of both these crops necessitates deep ploughing which could be achieved only through an iron ploughshare. Moreover, deep ploughing also underlines the necessity of periodically sharpening the ploughshare, which could now be done by means of bellows. That all these are indications of a developed system of agriculture is beyond doubt. Pāṇini, however, makes the situation clear when he refers to the ploughing of fields twice or thrice and their division according to crops. Thus an improved knowledge of cultivation coupled with the use of effective implements enabled the peasants to produce more surplus, thereby leading to the emergence of towns in this period.

The effective use of iron technology also affected other spheres of societal development. The new technology seems to have brought considerable improvement in means of transport R.S. Sharma refers to a *Jātaka* passage which informs us that a sheath of iron, two inches wide, was put round the outer edge of the wheel to make it very strong.[46] This improvement in technology was certainly a positive contribution to the

field of commercial development. That improved means of transport certainly help trade is a universally recognised phenomenon hardly needing any elaboration. In fact, so developed was the technology of iron in early historical India that iron itself formed an important item of export. Herodotus, writing in the 5th century B.C., refers specifically to the iron-tipped arrows carried by Indian soldiers of the army of the Persian ruler Xerxes.[47] Further, Ktesias, a contemporary of Herodotus, pays tribute to the excellence of two swords of Indian steel presented to Artaxerxes Mnemon.[49] Thus it is certain that trade in Indian iron had already begun in this period.

The general picture that one gathers about the role played by iron in contemporary economy is one of a catalytic agent hastening changes in all directions. The very nature of agriculture was changed, from a subsistence economy it was transformed into a food-producing economy yielding sizable surplus, so necessary for the emergence and maintenance of towns. Similarly it affected trade by facilitating communication. Now trade became relatively easier, and hence more developed. Thus, surplus and trade, two necessary concomitants of urban development, were brought to the fore to sustain the emerging urban pattern. Iron technology, therefore, played the most crucial role in the emergence of towns in the early historical period.

Thus, by the 6th century B.C. the stage was well set for urban revival in northern India. W.A. Fairservis has tried to explain the movement of urbanisation from west to east in northern India on the basis of a table.[49]

Fairservis, in working out this table. seems to be largely influenced by the traces of Harappan cultural objects found at sites like Hastināpura and Ahichchhatra in association with the ochre-coloured pottery (OCP). Urbanisation, however, cannot be associated with this ware. It might have carried the legacy of urban tradition but it hardly reflected such a situation during this period. These sites, along with Atranjikhera, can however, be treated as indicating a distinct shifting of the urban tradition from Punjab, Sind and North West Frontier eastwards. The next period represented by Kauśāmbī certainly manifested the signs of urbanism, a tradition which definitely reached the middle Ganga Valley by *c.*600 B.C. as evinced from

	2500-1500 B C.	*1500-1000 B.C.*	*1000-500 B C.*	*500-1 B.C.*
Bengal	X	X	X	Mainamati Mahāsthān Tāmluk
Orissa	X	X	X	Jaugaḍa Sisupālgarh
Bihar	X	X	X	Pāṭaliputra
Central Ganga Valley	X	Hastināpura Ahichchhatra	Kauśāmbī Jhusi	Mathurā
Punjab & N.W. Frontier	Harappa	X	X	Charsada Bhir Mound, Taxila
Sind	Mohenjo-daro	X	X	X

the archaeological remains from and literary tradition regarding Rājagṛha. Pāṭaliputra got urbanised subsequently and the urban movement travelled further eastwards.

The period from *c.* 600 B.C. to 322 B.C. is noted as an era of urban revival, marked by growing economic prosperity. Aristobulus, who was sent on a commission by Alexander to a region left desert by a shifting of the Indus to the east, is said to have noticed the remains of over a thousand towns and villages in this area. Though this account is apparently an exaggeration, and these towns have not yet been excavated, and precisely located, there is hardly any doubt about the beginnings of urban life in this period. The Jaina canonical texts also mention different types of urban settlements such as a scot-free town, a town with an earthen wall, a town with a small wall, an isolated town, a large town, a sea-town and a capital town.[50] The Buddhist texts, taking the country as a whole, assign sixty well-known towns to this period, spreading from Champā in the east to Bhṛgukachchha in the west, from Kāveripaṭṭana in the south to Kapilavastu in the north.[51] Big cities like Śrāvasti were twenty in number, and Ānanda in the *Mahāparinibbāna Sutta* expresses his anxiety over the Buddha's

decision to attain *parinirvāna* at Kuśīnārā, leaving aside the important cities of Champā, Rājagṛha, Sāketa, Kauśāmbī and Banaras. The same idea is repeated in the *Mahāsudassana Jātaka* also.[52] Some of these cities, however, had a later origin.[53] Thus, the available evidences clearly indicate that by the time of the birth of the Buddha, towns in north-eastern India had become fairly common, a fact also deducible from the material culture at the time of the Buddha's birth. At Kapilavastu the young Siddhārtha is placed in a palace complete with harem, he has a stable of horses with grooms, there is a school at which he studies, he meditates in an enclosed garden, robes and objects of great richness and variety are part of his daily life. These are distinct cultural manifestations of urbanisation.

This urban revival was influenced by several factors, all more or less the result of the extensive use of iron technology. It not only revolutionised agriculture, but also led to a rapid specialisation in arts and crafts in the age of the Buddha. Though the archaeological evidence for the increased division of labour is not very impressive in the iron age sites of the middle Gangetic basin, the material remains of many crafts encountered at these sites[54] suggest the existence of specialised workers engaged in various arts and crafts. This period was certainly marked by working in iron and silver mines as well as smithy in these metals, minting of copper and silver and bead-making. Glass manufacturing also developed together with the working in ivory and other precious metals. The palisades at Pāṭaliputra and also at Jaimanglāgarh and references to wooden structures apparently due to abundant supply of timber indicate that carpentry was a highly developed craft. Brick-laying together with the introduction of baking must have engaged a good number of artisans along with a considerable number of construction workers. Tanks and ring wells together with moats and channels for fortifications presuppose a good number of workers engaged in digging, especially in the initial stage when these were dug for the first time. The existence of a considerably large number of potters engaged in making black-and-red ware, grey ware, PGW, black slipped ware, red ware and different shades of NBP, is yet another proof of rapid specia-

lisation in crafts in this period. R.S. Sharma refers to an early Pāli text which informs us that Saddalaputta of Vaiśālī (the chief potter) engaged some 500 potters.[55] The *Dīgha Nikāya* which speaks of 28 crafts seems to be reliable, for it differs from the conventional number of 18 so frequently mentioned in the Buddhist texts. Together with this emerged the groups of professionals, like physicians, barbers, tailors, etc., and retainers, like household servants, cooks, bards, etc. Thus, even if we make allowance for the part-time and undifferentiated vocations of some artisans, as well as professionals and retainers, still a large number of artisans, professionals and retainers left, needed markets for their products and patrons for the services offered by them respectively, and they themselves needed food. The king, his soldiers, administrators, merchants, etc., together with Buddhist and Jaina monks, also needed food. Thus, the impression one gets from the combined evidence of literature and archaeology regarding towns is that differentiation of occupations, especially of crafts, contributed largely to urbanisation in the age of the Buddha.

A unique development of this period was the localisation of industries at certain places. The *Jātakas* refer to artisans, like carpenters and smiths, who tended to settle in villages exclusively peopled by the persons of one single profession.[56] These centres prospered because they were geographically located at such places which produced raw materials as well as commanded traffic letouts for the consumption of these goods. Such 'industrial' villages are a peculiarity of this period. These centres, in the beginning, were partly agrarian and partly industrial in the sense that besides the industrial activities the residents of such villages may have engaged themselves in agriculture as well.[57] But, in due course, because of greater demands for their goods and increasing specialisation, these centres might have shed their rural background and emerged as towns.[58] This partly explains the absence of such settlements in later times.

Craft specialisation and 'industrial' achievement were to a large extent aided by the growth of the institution of guilds which, in turn, helped urban development. These guilds, which were craft associations, by regulating the service conditions as well as production of the artisans and craftsmen, provided the

much needed organisational help to the various crafts. The guilds naturally came to occupy an important place in the urban economic set-up of the period. The *Jātakas* refer to eighteen guilds, all of them connected with different urban professions. A noticeable aspect of the contemporary economic life was the separate areas earmarked for different guilds. This, no doubt, gave impetus to the tendency of localisation of crafts, but, at the same time, it tried to remove unnecessary tension that might be generated by the existence of different crafts and industries at one particular place. The guilds, besides their regulative and organisational functions, also looked after the proper training of apprentices thereby enlarging the horizon of urban economy. Due to tendency towards localisation the general trend that obtained in this context in this period was the hereditary transmission of skill possessed by a member of a particular art or craft.

Trade, an important causative factor of urbanisation, also flourished along with development of arts and crafts. Any consequential growth in industry implied the need for areas where these goods could be consumed. This naturally proved to be a significant factor for development of trade in this period. Trade also received great fillip due to improvement in the means of transport. The *Jātakas* very often attest to the existence of brisk inland and foreign trade in this period. The contemporary literary texts refer to traders laden with commodities frequenting the distant and difficult trade routes in the country. The early *Jātakas* often tell us about caravans of 500 or 1000 carts each, loaded with trade goods, going from one place to another.[59] It has been suggested that trade was mainly confined to luxury goods,[60] a suggestion which is not warranted by available facts. The early Pāli texts suggest that cotton came into general use in the age of the Buddha, which implies brisk trade in cloth, and cloth was certainly not a luxury item. Similarly a merchant is described as going to the countryside with 500 wagons, all filled with jars of sugar [61] This large quantity of sugar being taken in one round, and that too to the countryside, obviously indicates that sugar was not a luxury article. Moreover, the very emergence of trade within an urban framework underlines its utilitarian character. An important function in an urban society is to supply the items of basic necessities to villagers in return

for the agricultural surplus that the latter send to the towns. No doubt, foreign trade had by now become an important aspect of urban economy, but surprisingly the early Buddhist texts do not tell us much about it.[62] It has been suggested, seemingly without any evidence, that external trade with even such distant lands as Babylon was being carried. We have, however, evidences in the early Pāli texts to suggest that navigation was facilitated with the help of shore-sighting birds.[63] Trade certainly led to the establishment of numerous markets which later assumed the character of urban centres. Even those towns, which had originated as seats of power came to assume commercial features because of their proximity to major trade routes.

Trade was further facilitated by the use of coined money from this period.[65] There are some numismatists who believe that coins were prevalent in the pre-Buddha period also. Thus, S.K. Maity interprets *rayis* as silver coins and thinks that they were in vogue in the Vedic period, and on this basis he rejects the theory of Kennedy and Smith that coins were introduced in India in as late as the 7th century B.C.[66] While, on the one hand, the interpretation of the word *niṣka* is controversial,[67] the *rayis*, on the other hand, can never be interpreted as silver coins and there is no justification for rejecting the view of Smith and Kennedy on this basis. The latter view, however, needs correction in the light of archaeological sources. The earliest Indian coins, silver punch-marked, have been assigned to a period not earlier than the Buddha. That money economy became quite important during this period can be gauged from the fact that even the price of a dead mouse is stated in terms of money.[68] With the introduction of money economy the cumbersome task of weighing silver or costly metals at every transaction post gave way to a simple medium of exchange, a development which provided not only an impetus to trade[69] but also accelerated the pace of urbanisation.

An important factor which helped commercial development was a comparatively wider diffusion of the knowledge of script. Literacy ceased to be a special privilege of the upper sections of society generally dominated by the priest. In the changing situation the small shop-keeper or peddler could learn enough to at least sign his name and keep his accounts.[70] This wider

diffusion of the method of recording certainly helped the merchants in carrying out their business with more ease. Talking about the originating point of this revolution in alphabet, Childe suggests that an international body of merchants sanctioned by use the new convention and diffused and popularised this system in the Iron Age through their conscious effort.[71] This might indicate the prevalence of foreign trade in this period as well.

The changing economic spectrum of the age of the Buddha also paved the way for significant changes in the contemporary social structure in a way which was highly congenial for the growth of urban centres. The old Vedic social structure, centring round the *varṇa* system, was rudely shaken by the new economy. The most vital change occurred in the social status of the vaiśyas. The vaiśyas, who had been accorded the third place in the *varṇa* hierarchy and denied all social privileges hitherto appropriated by the brāhmaṇas and the kṣatriyas, became very wealthy by completely identifying themselves with the new economy. But their growing wealth and the new power were hardly recognised in the village society which, dominated as it was by the brāhmaṇical normatives, refused to dole out any privilege to the vaiśyas. The position in the towns was, however, quite different. Because of their hold over the urban economy through trade, money-lending, etc., the vaiśyas came to be recognised as an important section of the society. The Buddhist texts repeatedly refer to the *seṭṭhis*, apparently belonging to the vaiśya community, possessing eighty *koṭis* (crores) of wealth and leading a prestigious life in towns; such was their importance and so enhanced was their prestige in the urban surrounding that even royal favours were bestowed upon them.[72]

A great contributory factor to the growth of trade and towns was the opening up of a number of trade-routes in the wake of the movement of Alexander's army from Greece to India. That the Persian thrust of the earlier days may also have been instrumental in creating a similar development, though on a limited scale, cannot be ruled out. While the Persian armed movement may have facilitated commercial connections between north-western India and Persia, the later invasion too brightened the trading prospects between north-western India and the western world. This together with the growing transportation relations

with the Deccan and south India provided an all-India market for north Indian urban products as well as exports. The discovery of the NBP, datable to the pre-Mauryan times, from the sites of the Deccan is a pointer to this development. Thus, the newly discovered routes connecting northern India with the outside world as well as with the various parts of the country itself, facilitated the growth of trade on a large scale. That these trade-routes were being increasingly exploited is also obvious from the development of means of production. A greater rapidity in the process of urbanisation now seemed imminent.

Linked with the changes in the socio-economic system was the development of new political institutions. The extensive use of iron was largely instrumental in the breaking-up of the early Vedic tribal political organisation, giving way to fixed territorial states in the 6th century B.C. These states, numbering 18 in this period,[73] were certainly centres of political authority and their respective capitals became increasingly important both politically and ecologically. With the growing complexity of the administrative system in the age of the Buddha, the number of officials increased, thereby increasing the population of these capitals substantially. Along with this increasing bureaucracy was the emergence of a standing army, another major constituent of the population of the capital. The retainers followed and along with them came the members of such professional classes, as physicians, barbers, etc. Another major factor which helped in swelling the population of these seats of power was their geographical location in economically significant areas. Almost all the capitals of these *mahājanapadas* were situated at such places which commanded traffic routes and thereby controlled the very arteries of trade. This economic aspect of the capitals provided them with an additional population of merchants, craftsmen and artisans. Thus, these capitals were not only seats of political power, but they also emerged as centres of trade, industry, education, religion as well as all the social activities. All these factors combined to give northern India its earliest urban centres, whose origins facilitated further urbanisation in this area.

The two heterodox sects, Buddhism and Jainism, also played a crucial role in making the atmosphere congenial for urban

growth. Emerging in a typical milieu, Buddhism was basically a religion in tune with the developing urban spirit and way of life. The position can be better understood if one keeps in mind the vehement opposition of the traditional Brāhmaṇical school to urban institutions and to the new way of life itself. The very bases of the urban way of life like trade, usury, public eating places, prostitution, etc., were being condemned by the orthodox village-oriented Brāhmaṇical law-givers. Buddhism not only came to terms with these new practices and institutions, but also gave implicit support to them in most of the cases.[74] The social philosophy of Buddhism clearly hints at its close connections with the community which virtually controlled the urban economy and which dominated the urban scene.[75] This was certainly a much-needed encouragement to the urban system. Moreover, the Buddha not only taught in favour of Buddhism but also made this support explicit through his own way of life. A study of the pattern of the Buddha's life, the milieu from which he emerged, and the different aspects of his public life, shows that the setting of his life was typically urban. His was a life spent in great centres, centres which were essentially urban in nature. The appeal of his doctrines was primarily to men who were making adjustments in the new urban milieu. Among the things which tradition suggests might be said in his praise was his abstinence from 'village ways' (*Gāmadhamma*),[76] a term which could also be translated as 'vile conduct'. T.W. Rhys Davids suggests that the phrase means "The practice of country folk. . . the opposite of *pori* urbane."[77] Later in the same passage it is said that the words of the Buddha are "pleasant to the ear, reaching to the heart, urbane (*pori*)."[78] The point here seems to be that the Buddha's urbanity of speech was consistent with the rational quality of the ideas which he expressed. With this complete harmony in his practices and teachings, the Buddha certainly strengthened the urban spirit and paved the way for the furtherance of the urban tradition.

Buddhism also helped urban growth by making a direct contribution to the development of agriculture, through its emphasis on *ahiṁsā*. The Vedic religion laid great stress on animal sacrifice, a fact also supported by archaeology, for animal bones from Atranjikhera are largely those of cattle bearing clear-cut marks, mostly antedating 500 B.C. The Vedic religious ideology

was thus a great hindrance to the development of new plough agriculture based on iron technology and animal husbandry. The Buddhist emphasis on non-injury to animals assumes a great significance in the context of the needs of the new agriculture.[79] Thus, Buddhism by trying to preserve the cattle wealth gave a boost to the new agriculture and thus enabled it to produce more surplus.

The above survey of the various factors responsible for the rise and growth of urban centres in the early historical India demonstrates that iron technology was vitally significant for this change from rural to urban way of life. Trade, agriculture, society and even religion bore the stamp of this new technology and all these factors contributed their mite to the revival and growth of urban tradition in India around *c.* 600 B.C.

The succeeding period (*c.* 322-187 B.C.) marked a further growth of towns. The period witnessed a centralisation of all economic activities under the aegis of the Mauryan state. The interest that the state evinced in various economic activities was a distinct help to the further diffusion of urban tradition. The older cities continued and a number of new urban centres cropped up. The most important city of the period was certainly Pāṭaliputra. The different literary sources indicate the cosmopolitan nature of this city. N.R. Ray suggests that the rise of Pāṭaliputra was basically the result of Achaemenian influence; he seems to suggest that the urban tradition of Pāṭaliputra was a borrowing from the Achaemenian urban model.[80] This assertion of Ray touches a basic point connected with the early historical urbanisation—whether it received any foreign impetus or was it involved indigenously?

That the second urbanisation in India had anything to do with Persia is seemingly a far-fetched and baseless suggestion. Ghosh, after analysing the 6th-5th century B.C. Persian situation comes to the conclusion that this area lacked any worthwhile urban tradition during this period.[81] At Pasargadae, begun by Cyrus in the middle of the 6th century B.C., city in the strict sense of the term hardly existed, for R Ghirshman clearly says that "it was indeed a vast camp, surrounded by a retaining wall, within which, amid parks and gardens, rose palaces and temples".[82] The picture is further cleared by R.E.M. Wheeler by his suggestion that the population, still very near to its

ancestral nomadism, lived in tents.[83] Thus Pasargadae, the product of a basically nomadic society, was nothing more than a caricature of a city, for nomadism and urbanism are hardly compatible as they are essentially mutually contradictory historical forces. Pasargadae was nothing more than a military camp; temples and palaces do not qualify a settlement for an urban centre, permanent residences of the citizens at large are also essential. The situation, however, slightly improved during the succeeding period. Persepolis, the subsequent capital, started by Darius I and completed by his successors, was better than Pasargadae citywise. At Susa, Darius I built a strong citadel and his palace and *apadana* over its ruins with some sense of planning, for the houses of courtiers, officials and merchants, were neatly separated from the palace by a broad avenue.[84] Though this capital had the semblance of a city, it was hardly an integrated urban settlement. These capital cities seem to have derived their rationale solely from the king; naturally, as long as the king was present in the capital, these centres had their existence as urban centres, but without him they had hardly any viable existence and were only "simultaneously the centre and expression of a suddenly-risen political power".[85] Paul Pampl too makes it clear that the Achaemenids had no city in the true sense of the term and the capital-cities that they had were basically transitory and impermanent in nature.[86]

It is highly surprising, therefore, to find Wheeler, who himself made clear the nature of Pasargadae, asserting that the Persian 'colonisation' of the north-western frontier regions in the second half of the 6th century B.C. was instrumental in supplementing and stimulating the second urbanisation of India.[87] One wonders at the use of the term 'colonisation' in this context. No colony was implanted in India in ancient times and even the Persian occupation of Gandhāra was transitory. Even excavations at Charsada and Taxila I (Bhir Mound) (according to Wheeler too the only two cities which could have anything to do with Persia) have hardly revealed anything Persian about them. John Marshall, another great protagonist of Taxila's Persian origin, admits that "there is no tangible evidence to support the conjecture. . . . To what extent the Persian domination made a durable impression upon the conquered Indian peoples there is not much evidence to show."[88] No

doubt, a very few number of objects of Persian origin have been discovered from the Bhir Mound, but they too are insignificant to warrant such a significant deduction.[89] The suggestion that the weight of the bent-bar punch-marked coins of the Gandhāra region was made to conform to the standard of Persian double *sigloi*[90] is at best a conjecture. Moreover, it should be kept in mind in this context, notwithstanding Marshall's suggestion to the contrary,[91] that punch-marked coins appeared in this part of the country well after their circulation in the Gangetic basin. Similarly nobody will now agree with R E.M. Wheeler's suggestion that iron came to India or was, at any rate, popularised here as a result of Achaemenian occupation.[92] Besides the absence of any tangible Persian impact upon Indian urban tradition of the north-west, one wonders how even a hypothetical connection between the urbanisation in the Gangetic basin and the urban tradition of Persia could be established. When the Persians were invading India, cities were already emerging in northern India and by the time Charsada and Taxila were emerging, cities like Kauśāmbī had already graduated in urban tradition. By the time the Achaemenids started moving towards India, the Indian cities were already on the move. Similarly it will be futile to trace any connection between early historical Indian urbanism and that of another neighbouring area, the Central Asia.[93]

This brings us to the possible Greek impact upon Indian urban tradition. No doubt, Alexander reared up certain cities in the Punjab, Sind and the north-west frontier areas, but these cities hardly seem to be of a permanent nature, a fact suggested by the absence of any archaeological remains of such cities. Even then it is exceedingly clear that Greek tradition hardly made any appreciable impact upon the Indian scene for the simple reason that by the time of Alexander's entry into India, the latter had come to have a well-established urban tradition, a tradition which was quite strong and of indigenous evolution. Even the so-called Alexandrian cities failed to convey any meaning to the Indian urban tradition and that is why they soon disappeared from the Indian scene. Thus, any attempt to connect Indian urbanism of early historical period with the one or the other foreign urban tradition seems to be misleading. The Indian urbanisation of this period was basically a product of

the contemporary economic developments in terms of the use of iron technology. Other factors no doubt contributed to this process, but all these factors were essentially of indigenous origin. It will be wrong, therefore, to view the urban growth of Pāṭaliputra in terms of either Persian or Greek impetus.

The characteristic feature of the Mauryan economy was state control over all economic activities, a situation which more or less favoured the furthering of urban tradition. The basis for all economic developments was the increasing knowledge of metallurgy and metal technology. Kauṭilya provides for the superintendent of mines (*ākarādhyakṣa*), who possessed a thorough knowledge of the technical aspects of mining, including metallurgy. The contemporary literary texts suggest the mining of gold, silver, copper, lead, tin, iron and bitumen, but archaeological evidence of the working of metals, other than copper and gold, is scanty. However, on the basis of numerous small heaps of iron slag found scattered all over the iron belt in south Bihar it can be suggested that these may have been the refuse of local iron smelters.[94] But it cannot be asserted that this evidence relates to the Mauryan period. Literary texts, however, are very explicit on this point. The *Arthaśāstra* mentions iron (*lohā*) in its various forms far more frequently than copper (*tāmrā*) and provides for an independent superintendent connected with this metal (*lohādhyakṣa*). This together with a few other officers, like *khanyādhyakṣa*, *lakṣaṇādhyakṣa* and *lavaṇādhyakṣa* all connected with different aspects of metal-working, not only gave the state a monopoly over mines but also led to the exploitation of the mineral resources in an organised way. This was certainly an important development, for this made available larger quantities of iron, etc. This meant that the state was now in a better position not only to equip its soldiers but also to furnish agriculture and industry with necessary tools and implements, a situation which not only helped the economy but also provided a direct impetus to urban development.

The most positive contribution of the Mauryas to urban development was through agriculture. They not only founded new rural settlements but also rehabilitated the decaying ones. This may explain the fate of the prisoners brought from Kalinga. Due to improvements in iron technology and its extensive use in the field of production, the clearance of forests became easy.[95]

Large tracts of land, previously forests, were made available for agriculture. In order to bring virgin soil under cultivation, even the śūdras were encouraged to settle down as farmers in the new settlements and remissions of taxes and other concessions by way of supply of cattle, seeds and money were allowed, in the hope that they would repay when they start yielding surplus. Strict measures, like non-entry of priests, acrobats, dancers, musicians and other performers into these settlements, were taken to ensure maximum production. In fact, Kauṭilya seems to foster the rusticity of the villagers in order to augment agricultural output so as to expropriate the maximum possible surplus from the people. This not only illustrates the exploiting character of the Mauryan state but also indicates the state's concern to get the maximum surplus from the countryside, which was necessary to support a large number of towns during this period.

The state also helped agriculture by providing for irrigation facilities. From the accounts of Magasthenes it can be gathered that the Mauryan officers measured the land as in Egypt and inspected sluices by which water was distributed into the branch channels, so that everybody might enjoy his fair share of the benefit.[96] This again reflects the concern of the Mauryan state to augment agricultural production which was a necessity in view of the expanding urban tradition during this period.

Besides this agrarian development the growth in arts and crafts together with increasing external and internal trade facilitated the further growth of towns. The literary as well as archaeological evidences suggest the existence of various specialised arts and crafts. The working and smithy in various metals together with the perfection in terracotta moulding suggests the existence of groups of specialised craftsmen. Similarly, the Maurya settlements exposing considerable use of burnt bricks implies the existence of specialised groups of brick-layers, masons, etc. The erection of free-standing monolithic polished pillars not only indicates developments in technology but also suggests the specialisation of crafts and division of labour. Similarly Aśokan inscriptions suggest the large-scale employment of masons, artisans and labourers all over India together with a specialised group of scribes, for hewing out pillars, polishing

them, carrying them to the right place and getting the inscriptions recorded. The existence of a considerable number of potters as well as construction workers is yet another indication of increasing specialisation in crafts and industries. Glass manufacturing, bead-making, etc., were other crafts which prospered under the Mauryas. Even prostitution emerged in the eyes of the state as a distinct economic activity. Together with this, the punch-marked coins, which account for the largest number of hoards associated with any coin series in ancient India and are spread over *c.* 500 to *c.* 100 B.C., mostly belong to the Mauryan period, suggesting not only the existence of a large group associated with their minting, but also the existence of a thriving trade during this period. Thus, this differentiation of and advancement in crafts certainly contributed to the urban development in this period.

That trade developed under the Mauryas is beyond doubt. Due to Alexander's invasion the one positive help that India got was the opening of new trade routes with the Western world. Both the Greek accounts and the edicts of Aśoka hint at the increasing communication between these two areas. Similarly a commercial connection with Ceylon too cannot be ruled out. Together with external trade, internal trade also prospered. Various parts of the country,p rimarily due to the exigencies of the military, came to be interconnected which also paved the way for an extensive all-India trade. The discovery of the NBP from certain sites of the Deccan and southern India points towards such commercial connections. The prevalence of a widespread mercantile system, which is so beneficial for urban development, is also attested to by the discovery of numerous hoards of punch-marked coins belonging to this period.

The political situation of the Mauryan period also favoured the growth of urban centres. The whole of India except the deep south came to centralised under a single authority. This not only paved the way for extensive internal trade but also led to the growth of a large number of administrative towns. The Mauryan empire, because of its policy of all-round centralisation, needed a large army and a vast bureaucracy, all of whom congregated in towns. This naturally led to the emergence of a still larger number of retainers and tertiaries. All this combined to provide a great fillip to urban development in this

period and partly explains too the emergence of Pāṭaliputra, the Mauryan capital, as a vast cosmopolitan city.

The religious factor also helped the growth of towns, especially during the days of Aśoka. This king, who substituted *dhammayātrā* or religious tour for *vihārā-yātrā* or pleasure tour,[97] gave a great impetus to Buddhist religious tourism. By himself visiting the important centres of Buddhism he encouraged Buddhist pilgrims to visit these areas. Those centres, like Kapilavastu, Buddha-Gaya, Sārnath, Kuśīnagar, must have started attracting pilgrims in greater numbers, and places other than Sārnath, which had already become an urban centre in pre-Mauryan times, probably got transformed into towns from previous rural settlements.

The contemporary literary sources also suggest that the urban tradition had become a vital force in the contemporary society. Kauṭilya's detailed regulations regarding urban administration, which has almost been corroborated by Megasthenes, is a case in point.[98] The Buddhist as well as Jaina sources belonging to this period also suggest the existence of numerous towns. Thus, the technological, economic, political and religious factors, along with certain other minor contributory elements, combined together to strengthen the urban tradition during this period. Widespread clearance of forests, increasing dependence on money economy, emergence of hitherto unimaginably larger groups of non-productive urban residents and the crystallisation of a political unity roughly throughout the length and breadth of the country helped decisively the growth of urbanism.

During the post-Mauryan period (*c.* 187 B.C.-A.D. 300) the process of urbanisation deepened further. The archaeological excavations conducted in a large part of northern India, Pakistan, Iran, Afghanistan and Soviet Central Asia indicate that the number of towns increased considerably under the Kuṣāṇas. An increase in urban centres is also suggested by the contemporary literary texts. Patañjali (*c.* 150 B.C.) was not only well acquainted with *nagara* as a unit of settlement, but also had the knowledge of some of the towns of his period.[99] The *Bṛhat Kalpa Bhāṣya*, a text of the early centuries of the Christian era, gives a list of states with their capitals[100] and it is well known that these capitals were well-known urban centres. The urban tradition had become so strong during this

period that almost all the important contemporary texts, like the *Buddhacarita* and the *Saundarananda* of Aśvaghoṣa, the *Milindapañho*, and the *Lalitavistāra*, record the various facets of city-life and describe it as one of comfort and luxury where trade and industry flourished, education was imparted, religious processions and discourses took place, and where people from different places congregated. In fact, literature and archaeology are completely in tune with each other as far as an expansion in urbanism during this period is concerned.

The most important factor that influenced urban growth during this period was the increasing economic prosperity. In this context it can be noted that the initiative taken by the Mauryas in opening new regions to trade and agriculture bore greater fruition in post-Mauryan times. The real significance of the Mauryan rule lay in spreading the use of coins, NBP, and advanced knowledge of iron technology even in areas outside the pale of Brāhmaṇical culture and this consequently led to the emergence of numerous towns even in the Deccan. In northern India too, the period is characterised by a remarkable proliferation of arts and crafts. We do not come across so many arts and crafts in the earlier Buddhist texts or the *Arthaśāstra* as during this period. Whereas the *Dīgha Nikāya* mentions about two dozen trades, the *Mahāvastu* contains a list of 36 kinds of trades existing in the town of Rājagṛha. And to top it all, the list is hardly exhaustive, for it is specifically mentioned at the end of this list that there were others besides those mentioned.[101] The *Milindapañho* enumerates as many as 75 occupations,[102] about 60 of which were connected with various kinds of crafts. Both the *Mahāvastu* and the *Milindapañho* clearly suggest a considerable advance and specialisation in the working of metals. In particular, progress in iron technology seems to have been considerable. The statement of the *Milindapañho* that even when beaten black iron carries weight and it does not give out the water it has once soaked in,[103] clearly suggests this progress. Cloth making, silk weaving, oil manufacturing, and the making of arms and luxury articles seem to have made progress in this period. In the inscriptions of the period a host of craftsmen, like weavers, goldsmiths, dyers, workers in metal and ivory, jewellers, sculptors, fishermen, smiths, and more frequently perfumers, figure as donors

to the Buddhist monks, which suggests the flourishing condition of their crafts. Thus, during the post-Mauryan period, the remarkable progress in arts and crafts naturally increased the tempo of urbanisation.

This period, along with the advance in arts and crafts, also witnessed thriving trade and commerce, both internal and external. Almost all important towns of India were connected with each other, either through land or water channels and some of them were even in direct connection with foreign trade-routes and trading centres. Thus, the entire Indian peninsula basically emerged as a single unit from the commercial point of view. Both the literary and archaeological sources indicate India's flourishing trade during this period. It appears that the merchants traversed the whole of India from north to south and east to west and even traded with the Roman world in the West and the Chinese empire in the East.[104] The volume of trade was in favour of India leading to an increasing prosperity in the country. Trade was certainly the cause as well as the effect of the unprecedented growth in the numbers of towns, which apart from being administrative, religious and industrial centres, also flourished as marts.

Trade was also facilitated by the ever-expanding money economy during this period. Although the Greek rulers issued a few gold coins, it was the Kuṣāṇas who issued them in considerable numbers. The Kuṣāṇa coinage also suggests the widespread prevalence of money economy, for they issued the largest number of copper coins. Copper coins were also issued in large numbers by the Nāga rulers, especially Gaṇapati Nāga, and by several indigenous dynasties such as those of the Yaudheyas and the Mitra rulers of Kauśāmbī, Mathurā, Avanti, Ahichchhatra, etc. It seems that probably in no other period money economy had so deeply penetrated into the life of the common people as during this period, a development which is fully comprehendable in the light of the growth of arts and crafts and the country's flourishing trade with the outside world.

The accelerated tempo of urban growth during this period was partly influenced by political developments also. Towards this the Kuṣāṇas made a distinct contribution. Through the process of carving out an empire, extending from Bihar in India to Central Asia, including parts of Pakistan, Iran, Afghanistan

and Soviet Central Asia, the Kuṣāṇas restored political stability in northern India, which had become a distant dream after the disintegration of the Mauryan empire. This not only facilitated urban growth, but trade also prospered because of their control over the Silk Route. The prosperity of Kuṣāṇa towns in India seems to have owed a great deal to the profit gained from this trade.

Thus, the post-Mauryan period was economically the most prosperous period of ancient Indian history.[105] The progress in arts and crafts, increasing external and internal trade, the restoration of political authority in northern India, and the widespread prevalence of money economy, combined together to lead to an unprecedented growth of towns. The guild organisation which regulated crafts and commerce might have helped this process. The older towns continued to flourish, while several new towns also sprang up as a consequence of developed trade, crafts and industries. Some of the Kuṣāṇa kings are also credited with the founding of new urban centres. Archaeology suggests that neither before nor after this period so many towns flourished in northern India.

The urban development in northern India seems to have received a setback during the succeeding period (*c.* A.D. 300-550). Although the indigenous literary texts contain graphic accounts of a highly sophisticated city-life, other sources tell us an altogether different story. Excavations at Gupta levels betray signs of poor habitation in the case of many sites. It seems that many important towns of the earlier periods were either decaying or had completely disappeared. Hsuan-Tsang who came to India in the post-Gupta period distinctly notes this process of urban decline and travelling through once important towns of northern India, he makes detailed observations on their ruined condition. This account too indicates that the process of urban decline must have started during the Gupta period itself. The poverty of the Gupta layer structures rather corroborates the observations of this Chinese pilgrim.[106] This is, however, not to suggest that India lost its cities in the post-Gupta times; the cities did exist during this period also but they were not as numerous as during the days of the Kuṣāṇas.

Thus, a survey of the history of second urbanisation in India suggests that the process which began in *c.* 600 B.C.,

unlike the first urbanisation, had a continuity in time and space. While during the Mauryan period the urban scene was further widened, it reached its climax in the succeeding period. From the Gupta period onwards urbanisation seems to have received a setback and instead of a further expansion of urban tradition, urbanism started declining, but it did not disappear altogether. As early historical urbanism, unlike the Harappan, had not taken a false start, the urban tradition continued to thrive though with varying fortunes.

The Iron Age cities in India had certain marked differences from their Bronze Age predecessors. To begin with, they basically differed in character. The Harappan cities, like most of their contemporaries in other parts of the world, were the centres of government dominated by the priestly class. The innate conservation of the Harappans and their weak mechanism of violence indicates the existence of an authority which was against any change and which ruled not with the help of violence but seemingly with the help of *dharma*. Such a theocratic nature of the Harappan state has also been suggested by a host of archaeologists. On the basis of the exposure of the so-called collegiate building, the pillared hall and the Great Bath, Piggott[107] and Wheeler[108] have presumed a rigorous bureaucratic machinery combined with and dominated by religious concepts. V. Gordon Childe too seems to be very clearly in favour of an ecclesiastical authority ruling over the Harappan zone.[109] Thus, the Harappan cities primarily seem to be administrative in nature and dominated by an ecclesiastical political authority. The picture, however, changes in the Iron Age. The cities of the later period emerged due to several factors, the economic being the most crucial one. The emergence of markets for disposing of agricultural as well as industrial products is a marked feature of the Iron Age economy. And, in due course, these markets emerged as developed cities. This is not to deny the existence of administrative towns, but even such towns were invariably converted into important trading centres. Thus, while the Bronze Age cities were dominated by the religio-political structure of power and subsisted on the food surplus drawn from the hinterland, the cities of the Iron Age were mostly commercial centres with a secular political system in which, at times, even the merchants had a say.

A notable difference between the Bronze Age cities and their Iron Age counterparts was in the method of production and distribution. While the Harappan state rigorously controlled all aspects of life,[110] the same was not true of the historical towns. Thus the Bronze Age cities not only lacked a powerful mercantile community but, unlike the Iron Age towns, failed to encourage crafts and trade. This was mainly due to the dominance of religion over the Harappan society.[111] Another dissimilarity is demographic in nature. Whereas the NBP phase witnessed a sizable increase in population, the same cannot be said of any Harappan period. R.C. Gaur, the excavator of Atranjikhera, clearly indicates that the NBP phase population at this site was more than doubled in comparison with that in the PGW phase.[112] The geographical location of towns in the Iron Age also tended to vary from that of the earlier Bronze Age towns. Thus the early historical cities came to cover a much wider area in the sense that, while the Bronze Age cities centred round the river valley only, the latter spread to wherever raw materials and transport facilities were available or markets for finished goods could be established. Quantitatively too the extent of urbanisation seems quite deep in the Iron Age than in the Harappan phase. Whereas out of more than 150 excavated Harappan sites only five or so can be regarded as towns,[113] the number of towns even towards the beginning of the 6th century B.C. was comparatively larger. This quantitative difference made a marked impact upon society and consequently the extent of unbanisation was markedly deeper in the Iron Age.[114]

It has been suggested that fortification and planning were the chief characteristics of the Bronze Age towns, "which may not be considered to be the essential elements of urbanization in the Iron Age".[115] The literary as well as archaeological sources do not agree with this suggestion. Because of the changed nature of towns—from purely administrative to some economic settlements—fortification was not necessary for all the Iron Age towns, but as far as planning is concerned one cannot say the same thing. Planning certainly was a part and parcel of city life.

There were, however, certain other distinctions between the Bronze Age and Iron Age cities. The Harappans were certainly

inferior to the early historical city-dwellerse as far as the technological know-how of the two groups is concerned. We are not hinting at the use of copper and bronze by the Harappans and iron by the early historical Indians; we are thinking in terms of the tools and implements of these two cultures and their quantitative use by them Thus, the Harappans used bronze sparsely in sharp contrast to other contemporary Bronze Age cultures, whereas iron came to be profusely used by the time of the Buddha. Similarly, both the weapons of war and tools of production of the Harappans are inferior in quality to that of the Iron Age people. The Harappans did not know even the use of ploughs a fact which illustrates the technological inferiority of the Harappans in comparison with the Iron Age people. Further, while wheat was the staple diet of the Harappans, the Iron Age people living in towns subsisted on rice. Wheat being a crop which decreases the fertility of the soil far more rapidly than rice, might have adversely affected the Indus agrarian economy, but such a loss of the fertility of the soil was mitigated with the popularisation of rice cultivation in early historical India.

The Bronze Age towns, because of several restrictions, could not survive for long and disappeared within 600 years from the date of their first appearance. The Iron Age towns, however, generated a continuous urban tradition with, of course, varying fortunes. This is not to suggest that the Harappan urbanism evaporated away in the vacuum; they too left the legacy of urban tradition for posterity, but that legacy was very weak. On the other hand, the beginnings of second urbanisation in *c.* 600 B.C. became instrumental in entrenching a tradition which has hardly witnessed any complete break of the Harappan type till the present time.

Thus, in the light of the above discussion the suggestion that "the basic nature of first and second urbanisation remained the same—the growth of only the capital cities or trading centres under the political patronage of the ruler, given directly to the trading community to create wealth and thereby earn prestige of the ruling authority; the remaining part of the country stood at level of peasantry and nomadism",[116] is highly misleading. This suggestion not only deliberately neglects the qualitative and quantitative changes brought about by the

second urbanisation, but also fails to appreciate its deep impact upon society. One wonders as to how the nature of the Bronze Age and Iron Age cities can be similar, especially in view of the distinct technological changes associated with either of them.

REFERENCES

1. *Infra*, Chapter I.
2. Except social stratification, Bruce Trigger lists all these factors as determinants for urban growth ('Determinants of Urban Growth in Pre-industrial Societies', *Man, Settlement and Urbanism*, eds., P.J. Ucko. R. Tringham & G.W. Dimbleby, 1972, pp. 579-592).
3. Paul Wheatley lists the following four factors : trade and/or marketing, irrigation, warfare and religion (*The Pivot of the Four Quarters : A Preliminary Inquiry into the Origins and Character of the Ancient Chinese City*, 1971, p. 281).
4. *Op. cit.*, p. 579.
5. *Ibid.*, p. 580.
6. *Ibid.*, p. 581.
7. E.B. Cowell (ed.), *The Jātakas*, Vols. I-VI (1895), *passim*.
8. R.S. Sharma, *Aspects of Political Ideas and Institutions in Ancient India* (1968), p. 294; also see *infra*, Chapter VII.
9. Bruce Trigger, *op. cit.*, p. 586.
10. Trade was the motive force behind the emergence of early Russian towns also. Klyuchevsky says, "The earliest big towns in Rus sprang up in the 8th century. These towns emerged as gathering-places for Rus trade, depots where Rus exports were stored and prepared for shipment. Each one of them was a centre of some industrial area and an intermediary between the latter and the maritime markets. But very soon events turned these trading centres into political ones, and their industrial areas into their dependent regions." Quoted in M. Tikhomirov, *The Towns of Ancient Rus* (tr. Y. Solobnikov), (1959), pp. 54-55.
11. *Infra*, Chapter V.
12. Bruce Trigger, *op. cit.*, p. 590.
13. *Arthaśāstra*, IV. 22, 1-32.
14. *Mahābhārata*, BK. II, Ch. 34.
15. Bruce Trigger, *op.cit.*, p. 591.
16. *Jātaka*, II. 193.
17. *Ibid.*, 150.
18. A.S. Altekar, *Education in Ancient India* (1948). p. 110.
19. *Jātaka*, III. 378.
20. *Ibid.*, 336.
21. *Ibid.*, IV. 489.
22. U.N. Ray, *Prachīn Bhārat main Nagar tatha Nagar-Jīwan* (1965), pp. 127-28.
23. A.S. Altekar, *History of Benaras* (1937), pp. 23-24.
24. *Op. cit.*, pp. 586-587.
25. *Journal of the Asiatic Society of Bengal* (New Series). Vol. V. p. 164. While editing the Amauna Plate of the *mahārāja* Nandana (*EI*, Vol. X, no. 10), T. Bloch reads the phrase as

sudrakenotkirṇam (I. 8), but this is not in accordance with the impression that one gets there; "the reading is clearly *śūdrakared-rakṣuṇaḥ*, which of course is incorrect Sanskrit" (R.S. Sharma, *Indian Feudalism : c. 300-1200*, 1965, p. 63, fn. 4).

26. V.K. Thakur, 'Beginnings of Feudalism in Bengal', *Social Scientist*, Vol. 6, nos. 6/7, pp. 77-78.
27. For a detailed discussion, see *infra*, Chapter IV.
28. G.R. Sharma, *Excavations at Kauśāmbī, 1949-50* (1969), p. 27.
29. Bruce Trigger, *op. cit.*, p. 590.
30. Cf. L. Mumford, *The City in History*, pp. 51-60.
31. *Ibid.*, pp. 64-65.
32. For details, see A. Ghosh, *The City in Early Historical India*, pp. 43-44.
33. K.K. Sinha, *Purātattva*, no. 5, p. 32. Y.D. Sharma, on the basis of C14 date obtained from lower levels of the NBP period, suggests the upper date bracket for Ropar (*Purātattva*, no. 5, p. 33). An earlier antiquity of the NBP industry on the basis of stratigraphic study at Kauśāmbī, Srāvasti and Atranjikhera cannot be ruled out.
34. K.K. Sinha, *Purātattva*, p. 32.
35. D.P. Agrawal, *Purātattva*, p. 35.
36. R.S. Sharma, 'Class Formation and its Material Basis in the Upper Gangetic Basin (*c.* 1000-500 B.C)', *IHR*, Vol. II, no. 1, p. 2. Also see O.P. Tandon, 'Alamgirpur and the Iron Age in India', *Purātattva*, no. 1, p. 58.
37. R. Pleiner, 'The Problem of the Beginning of the Iron Age in India', *Acta Prāehistorica et Archaeologica*, Vol. 2, p. 30.
38. Tandon, however, rules out this possibility also (*op. cit.*, p. 58).
    He seems to fail to appreciate the fact that this was the period when expansion was being made towards Gangetic basin.
39. A study of the distribution map of iron ores of India reveals that the richest deposits of this ore are situated in Bihar, Madhya Pradesh, Maharashtra, Orissa and South India. Only small deposits are found in Northern India in Mandi (Himachal Pradesh), Kumaon, Nainital and Almora (all in Uttar Pradesh) and Kashmir. Small iron ore deposits can also be located in Narnaul and certain parts of Rajasthan. Some of these were possibly smelted in indigenous furnaces at Rajgarh in Alwar district (N.R. Banerjee, *The Iron Age in India*, p. 190). These small quantity ores were probably within an easy access to the users of PGW as they lie almost near the PGW sites of Rajasthan. But in the absence of any spectrographical examination one cannot be quite certain on this point.
40. R.S. Sharma, *op. cit.*, pp. 1-13.
41. O.P. Tandon, *op. cit.*, p. 59.
42. R.K. Chaudhary, 'Iron and Urbanisation in Ancient India', *The Journal of the Bihar Purāvid Parishad*, Vol. I, p. 130.
43. *Pāṇini*. VII. 3. 47
44. *Uvāsagadasāo* (ed. A.F. Rudolf Hoernle, 1890), p. 108.
45. D.D. Kosambi, *The Culture and Civilisation of Ancient*

India in Historical Outline, p. 123.

46. R.S. Sharma, *Light on Early Indian Society and Economy* (1966), p. 60. A. Ghosh deliberately tries to undermine the significance of this development when he suggests, "There might not have been any significant changes in the means of transport, except the substitution of iron components for copper-bronze ones" (*op. cit.*, p. 14)
47. Cited in H C. Raychaudhuri, *Political History of Ancient India* (1953), p. 242.
48. Cited in R S. Sharma, *op. cit.*, p. 61.
49. *The Roots of Ancient India*, p. 379.
50. *Antagada-Dasāo* (tr. L.D. Barnett), pp. 44-45; *Kalpasūtra* (ed. H. Jacobi). p. 89; *Sūyagadam* (ed. P.L. Vaidya), 11.2 6.
51. S K. Das, *The Economic History of Ancient India* (1944), pp. 179 83.
52. *Jātaka*, I. 95.
53. A. Ghosh seems to accept the traditional description of the number of cities without considering the nature of the accounts; he even says that there might have been a few more places qualifying themselves for the urban status, but they have not been mentioned in the Pāli texts as they lay beyond the Buddha's ken (*op. cit.*, pp. 15-16). The excavations, however, tell a different story. The archaeological evidence seems to suggest that only Hastināpura, Kauśāmbī, Rājagṛha, Vaiśālī and Chirand were flourishing as urban centres in the 6th century B.C. Both Srāvasti and Pāṭaliputra had a later origin.
54. R.S. Sharma, 'Iron and Urbanisation in the Ganga Basin', *IHR*, Vol, I, no. 1, p. 101.
55. *Ibid.*
56. R. Fick. *The Social Origanisation in North-East India in Buddha's Time* (English Translation, 1920), pp. 280-285.
57. The sole explanation for the emergence and existence of such settlements cannot be taken to be their need to carry on some cultivation in order to survive. as suggested by Irfan Habib, 'The Social Distribution of Landed Property in Pre-British India (A Historical Survey)', *Indian Society: Historical Probings* (eds. R.S. Sharma & V.N. Jha, 1974), p. 272. They were probably the members of the same guild and shifted from the town proper to a nearby place to carry out their work more cohesively. Such settlements naturally grew into villages and the members of the different villages might have started cultivation under the over-all supervision of their respective guilds.
58. Here we have probably an evidence of such towns where a considerable amount of food is produced by the city inhabitants themselves working on parttime basis in the fields (Bruce Trigger, *op. cit.*, p. 579).
59. *The Baveru Jātaka, Samkha Jātaka, Mahājanaka Jātaka, Sammudāvaṇija Jātaka*, etc., even allude to foreign trade

during this period. See, *The Jātakas* (ed. E.B. Cowell), Vols. I-VI, *passim; Digha Nikāya*, II, p. 344; *ibid.*, p. 128.

60. R.S. Sharma, *Light on Early Indian Society and Economy*, p. 64.
61. *Vinaya Piṭaka*, I, p. 224.
62. N.K. Wagle, *Society at the Time of the Buddha* (1966), pp. 146-77.
63. R.S. Sharma, *op. cit.*, p. 64.
64. *Aṅguttara Nikāya*, III, p. 368.
65. If one studies the coins *vis-a-vis* the urban framework the unmistakable impression that one gets is of their intimate connection. For details, see V.K. Thakur, 'Coins and Urban Centres', *The Indian Numismatic Chronicle*, Vol. XII, pts. 1-2, pp. 115-18.
66. S.K. Maity, *Early Indian Coins and Currency System* (1970), pp. 19-20.
67. Most probably the *niska* meant "a gold ornament on the neck" (U. Thakur, *Mints and Minting in India*, 1972, pp. 7-8).
68. R.S. Sharma, *op. cit.*, p. 64.
69. Talking about the introduction of money economy in the context of trade V. Gordon Childe says, "Two grave embarrassments to early trade were, firstly, that at every transaction the quantity of silver representing the price had to be weighed out—and it was all too easy to falsify the weights—and, secondly, that the metal paid out might be fraudulently debased. Soon after 800 B.C. Assyrian and Syrian kings began stamping bars of silver, guaranteeing the quality of the metal. The second defect of the old Bronze Age money was thus eliminated. Coins, pieces of metal of a fixed shape and a standard weight stamped and guaranteed by the state as to both quality and weight, eliminated the first too" (*What Happened in History*, 1960, p. 192).
70. The nature of this diffusion can be better appreciated if one keeps in mind that by the 7th century B.C. even common soldier learnt the art of writing (*ibid.*, p. 191).
71. *Ibid.*, p. 182.
72. It seems plausible that in new urban surrounding, unlike the partnership between the king and the priest, a new power equation emerged. The new partners of power were the kings and the merchants. While the kings controlled the politico-administrative set-up, the merchants provided the economic base to the new urban structure as well as the political system. Also see, S.P. Gupta, 'Two Urbanisations in India : A Side Study in Their Social Structure', *Purātattva*, no. 7. pp. 53-60.
73. H.C. Raychaudhuri, *op. cit.*, pp. 95-96. A. Ghosh's suggestion that the exclusion of western Rajasthan, Gujarat, Orissa and South from the list of *Solasa Mahājanapadas* may imply the absence of urban centres in these areas at the time of the composition of the list (*op. cit.*, p. 35) is hardly tenable. The absence only indicates the lack of knowledge

about this area on the part of the composers of the list.

74. R.S. Sharma, "Material Background of the Origin of Buddhism', *Das Kapital Centenary Volume* (eds. M. Sen and M.B. Rao, 1968), pp. 62-64; V.K. Thakur, 'Origin and Growth of Buddhism in India', *The Maha Bodhi*, Vol. 85, nos. 2-3, pp. 37-41.
75. Fairservis' suggestion that Buddhism is a reaction to the urban way of life (*op. cit.*, p. 379) betrays a wrong understanding of the whole situation. In direct contradiction to his views, Buddhism can basically be regarded a religion taking the urban side in the contemporary rural-urban philosophical-ideological struggle. Buddhism was definitely a religion seemingly fighting for the privileges of the powerful emerging urban groups hitherto denied any social recognition and prestige worth the name, in a society dominated by orthodox Brāhmaṇical normatives.
76. T. Ling, *The Buddha* (Pelican Books, 1976), p. 129.
77. T.W. Rhys Davids, *Dialogues of the Buddha*, pt. I (1899), p. 4, n. 3.
78. Quoted in T. Ling, *op. cit.*, p. 129.
79. R.S. Sharma, *op. cit.*, p. 61; V.K. Thakur, *op. cit.*, pp. 37-38.
80. 'Rural-Urban Dichotomy in Indian Tradition and History'. *ABORI* (Diamond Jubilee Volume, 1978), p. 874.
81. A. Ghosh, *op. cit.*, pp. 86-87.
82. *Iran* (1954), p. 134.
83. *Flames over Persepolis* (1968), p. 33.
84. R. Ghirshman, *op. cit.*, p. 164.
85. S. Moscati, *The Face of the Ancient Orient* (English Translation, 1963), p. 288.
86. *Cities and Planning in the Ancient Near East* (1968), pp. 118-19. The Persian situation makes an interesting contribution to the discussion regarding the primacy of economic or political factor in the origins of urbanisation. Here we have an instance of towns which were 100% political in origin; the same instance illustrates the nature and fate of such settlements.
87. *Civilization of the Indus Valley and Beyond*, p. 48.
88. *Taxila*, I, pp. 12-13.
89. One wonders why Marshall blatantly ignores any possible connection between the eye-beads discovered at Bhir Mound and the eye-beads of prehistoric India (*op. cit.*, p. 103).
90. E.H.C. Walsh, 'Punch-Marked Coins from Taxila', *MASI*, no. 59 (1939), p. 3.
91. Marshall, *op. cit.*, p 103.
92. *Charsada* (1962), pp. 43-46.
93. A. Ghosh, *op cit.*, pp. 87-88.
94. Murray, *Journal of the Royal Asiatic Society of Bengal* (3rd Series), Vol. VI, p. 79.
95. This large scale clearing of forests naturally resulted in the easy availability of timber and this explains why wood was the chief building material during this period, and why Pāṭaliputra was always threatened by fire.
96. Cited in R.S. Sharma, *Light on Early Indian Society and Econo-*

my, pp. 66-67.

97. R.E. VIII; also see H.C. Raychaudhuri, *op. cit.*, p. 343.
98. *Infra* Chapter VI.
99. The following towns were noted by him : Ahichchhatra, Avanti, Ujjayinī, Kāñchīpura, Kānyakubja, Kāśī, Kiṣkindhā, Kauśāmbī, Gavīdhumat, Mathurā, Madhyamikā, Māhiṣmati, Nāsikya, Pāṭaliputra, Vārāṇasī, Sauvahāna, Sāketa, Sānkāśya, Srughna, Hastināpura, Śaurya and Jāmbava (P. V. Kane, 'Ancient Cities and Towns Mentioned in the Mahābhāṣya', *JBBRAS*, New Series, Vol. XXVII, pt. I, pp. 38-42; B. N. Puri, *India in the Time of Patañjali*, 1957, pp. 86-87). Though some of these towns cannot be identified now, yet the list gives a fairly good idea of the deepening of urban tradition during this period.
100. J.D. Jain, *Life in Ancient India as Depicted in the Jaina Canons* (1947), p. 246.
101. Cited in R. S. Sharma, *op. cit*, 74-75.
102. *Milindapañho* (V. Trenckner, 1928), p. 331.
103. Ibid., p. 415.
104. Cf. B. N. Mukherjee, *The Economic Factors in Kuṣāṇa History* (1970), pp. 15-16.
105. Some of the early nationalist historians regarded this period as a "dark age" in the annals of ancient Indian history mainly because of its lack of grandiose and imperialist indigenous political dynasties and the recurrent foreign invasions. This reflects not only the type of history that they were writing, but also their blatant neglect of economic factors.
106. For a detailed analysis of the various aspects of this development, see *infra* Chapter V.
107. S. Piggott observes, "It is clear that the forces behind the organization of the Harappa Kingdom cannot have been wholly secular, and there is more than a hint that the priesthood of some religion played a very important part in the regulation of Harappa economy from within the walls of the citadels of the two capital cities. Such rules by priests, or priest-kings, would be wholly in accordance with what we know of other ancient civilizations in Western Asia, where the written record has provided us with an insight beyond the limits of archaeology, and it is unlikely that the Harappa civilization, individual though it was, differed radically in this respect from its sister kingdoms (*Pre-Historic India*, p. 201).
108. R.E.M. Wheeler writes, "We may suppose that each city was regarded by rulers who may, on general probability, have had priestly attributes" (*Early India and Pakiṣtan*, 1959, p 97).
109. *Op. cit.*, p. 127.
110. "The dead hand of conservatism in design, rather than in technique, lies heavy on all the Harappa products. Complex technical processes were known, well-understood, and admirably organized for production, but the output suffered from standardization and an almost

puritanical utilitarianism. Working within such narrow limits of traditional forms, fossilized over the centuries into a rigid, inescapable mental prison, the artist or craftsmen could have found ittle outlet save in developing technical virtuousity" (S. Piggott, *op. cit.*, p. 200).

111. R.E.M. Wheeler's suggestion that "a large number of substantial courtyard houses imply a wide distribution of wealth and a prosperous middle class during the best periods of Mohenjodaro" (*op. cit.*, p. 97, fn.), is hardly convincing; Upendra Thakur, *Corruption in Ancient India* (1979), Chap. IV.

112. Cited in A. Ghosh, *op. cit.*, p. 60.

113. Lesser number of towns in the Harappan phase was a direct result of the nature of their technology. The surplus produced here, in spite of the fertile soil, was relatively much less than in Mesopotamia or even the narrow valley of the Nile. Lack of intensive agriculture and irrigational facilities probably contributed to this situation. Similarly their restricted technological scenario reflected by the sparse use of bronze and absence of plough obliterated the possibility of any considerable surplus yield.

114. Agreeing with this development V. Gordon Childe remarks, "In the first five centuries of the Iron Age the continuous area of civilization, after the temporary contraction at its start, expanded more than it had in the previous fifteen centuries of the Bronze Age. By 500 B.C. the zone of literate societies, accustomed to urban life and dependent on an urban economy, extended continuously from the Atlantic coasts of Spain to Jaxartes in Central Asia and the Ganges in India, from Southern Arabia to the north coasts of Mediterranean and the Black Sea" (*op. cit.*, p. 187).

115. R.S. Sharma, 'Iron and Urbanisation in the Ganga Basin', *IHR*, Vol. I, no. 1, p. 101.

116. S.P. Gupta, *op. cit.*, p. 58.

3

Urban Economy

THE emergence of cities signifies a new form of economic structure quite distinct from the rural surroundings. The very existence of towns presupposes the crucial role of a specialised group of merchants and craftsmen. Cities emerge generally in a complex and socially stratified society. In almost all these societies the elite seeks to possess clothing, jewellery, utensils and other items of personal use quite distinct from those of the ordinary folk. This is bound to result in a distinction between the everyday tools and implements of the lower classes, which usually are manufactured by craftsmen who produce a wide range of goods, and elite items which are produced by specialists who are better skilled because they concentrate on a narrow range of work. This kind of division of labour and narrow specialisation not only leads to a higher level of technical perfection but also substantially reduces the cost of production, since the work can be divided among more and less skilled

craftsmen. But the production of this sort can be achieved only through an organisation which can effectively coordinate and regulate the activities of the various categories of craftsmen. In the Indian urban context this objective was quite comprehensively achieved by various guild organisations.

We are, however, not asserting that all forms of specialisation necessarily lead to the development of larger communities. The neolithic example is a case in point. There is no doubt that even the most primitive craft production is specialised, if only along age and sex lines. Take, for example, the bone tool-making industry in neolithic Chirand. The various processes involved in its making and the technical perfection achieved by its makers[1] certainly indicates some sort of specialisation. However, specialisation beyond what is possible in the closed economy of a neolithic village could be achieved in the Indian context only by centralising it in cities. This again does not mean that goods in an urban society were not produced in non-urban settings. The Buddhist texts refer to certain villages exclusively inhabited by persons practising a particular craft. A village of reed-makers (*halakāra*) was situated near the city of Savatthi[2] and a village of salt-makers (*loṇakāra*) was to be found near Kauśāmbī.[3] These craft-villages certainly played an important role in the contemporary urban economy. Here it must be noted, however, that these craft-villages were generally situated near a town and they might have been just an extension of the specialised craftsmen residing within the city-walls. In the lack of a proper place for their accommodation within the town proper these groups might have shifted to a nearby place and probably continued to play an important role in the economic life of the neighbouring town. In spite of these marginal exceptions, it would appear that in the case of a majority of industries the degree of specialisation which is possible and required in complex societies can be achieved only by the concentration of different kinds of manufacturing at a common centre. The proximity of related vocations encourages greater interdependence and hence more specialisation. To cite just one instance, in such situations the production of tools and implements and the working up of raw materials for various crafts can be left to other specialists, whereas if each craft is geographically distant workmen normally manufacture their own tools, implements, etc.

Linked up with the growth of specialisation of crafts is the development of trade. More specialised production increases the need for mechanisms to distribute what is produced. In ancient India, commodity production and trade were controlled both privately and by the state. Where craftsmen were attached to the royal court or employed by institutions such as the temple or army, these organisations normally supervised the distribution of goods. As a consequence, such organisations became major sub-systems within the economic system and their activities gave rise to corps of specialists concerned with storage, transportation and keeping accounts. The state also regarded some productions as its monopoly, especially the mines, coins, alcohol, etc. The king declared some forests as his own for protecting, capturing and taming elephants, he had his own land for his herds of cattle and his own branch of agriculture. Thus an important sector of several kinds of production and distribution belonged to the state. This public sector of production and distribution with its infrastructure is typically Mauryan in nature because both in pre-Mauryan and post-Mauryan periods the state played a very limited role in matters of production and distribution, the rich individuals and the guilds were the most important factors in the economic system.

In those times bilateral exchange took place at the most basic level by a producer selling his goods either in his own shop or in the market place. Increasing complexity tended, however, to produce specialists who were concerned exclusively with buying and selling of produce. Two groups of people came forward for this purpose: either retail merchants who sold goods within the community or wholesale import-export merchants who carried on long-distance trade. Auxiliary to these merchants were men who transported goods and craftsmen who constructed and maintained the means of transportation. Even in the ancient urban societies trade, like production, went on in non-urban areas also. The rural periodic fairs were not something uncommon at that time Long-distance trade was, however, centred in the towns rather than at these rural sites because the former were centres of production and consequently that of distribution besides being better secured and protected.

Long-distance commerce, often between more and less elaborately organised societies, has been shown to play a major part

in town development, whether as permanent staging or transhipment posts, or as "temporary towns" as some of the great fairs and markets may be called.[4] Undoubtedly the goods were moving over considerable distances in Europe in the third millennium B.C. and in the second and first millennia B.C. trade routes linked Mediterranean centres with northern Europe. Along these routes were large settlements with widespread development in local coinage in the centuries preceding the Roman conquest, which must have been a by-product of this commerce.[5] Similarly, in addition to being collecting centres for the incense trade, the cities that developed in the first millennium B.C. in south Arabia were entrepots in vast networks of trade that embraced India, East Africa and Mediterranean.[6] Insofar as a city is dependent upon long-distance trade, its prosperity and population can be adversely affected if political or economic changes lead to a decline in trade. Henry Pierenne has very ably demonstrated this hypothesis by brilliantly documenting the importance of trade for the revival and development of urban life in medieval Europe.[7]

Thus, from a theoretical point of view there emerge two important aspects of urban economy—specialisation of crafts and commodity production on the one hand and trade both internal and external on the other. On the basis of both archaeological and literary evidences it is evident that by the 6th century B.C. the urban economy of northern India revolved around these two basic determinants. It however seems certain that these developments were aided and, in turn, catalysed by the use of iron and the introduction of coinage. With iron implements not only the agrarian technology was revolutionised, but dense forests were cleared and brought under the plough. This meant a rich agricultural hinterland which was an indispensable factor for the growth and prosperity of a city. Trade too received further impetus from improvement in means of transport. A later *Jātaka* records that a sheath of iron, two inches wide, was put round the outer edge of the wheel to make it very strong.[8] The transition was being made from a subsistence economy to a market economy and the introduction of coinage also played its part in this development. It led to greater mobility, accelerated trade and commerce and facilitated intercourse over a vast area and resulted in the growth of a

complicated economic system which was typically urban in nature.

That the urban centres had their own distinct economic system is revealed from a number of literary and epigraphic sources belonging to our period. As discussed earlier, urban economy revolved round two important factors—industry and trade. Our sources make explicit references to both these activities. Before discussing these aspects one point must be clarified at the outset. On the basis of the references in our sources various urban occupations can be broadly categorised into two groups, i.e., those connected with productive activities and those which had nothing to do with production as such. The second group which was mainly composed of administrative officials and the tertiaries had hardly any direct impact on the urban economy. The merchants, however, who belonged to this category were an intermediary group playing a vital role in the system of distribution. This is not to say that urban economy was independent of royal control; it was never so and at times, it was virtually controlled by it as was the case under the Mauryas. The only point that we are trying to make is that bureaucracy as a group made hardly any contribution to the development of urban economy. Thus while discussing urban economy our main concern will be to concentrate on such professions which were productive in nature as well as the role of merchants.

The Buddhist and Jaina literature, the *Milindapañho*, the works of Aśvaghoṣa, the *Kāmasūtra*, the *Rāmāyaṇa* and similar other texts are replete with references to urban occupations and crafts during the period. The *Jātakas* refer to various industries and crafts connected with cities. The *Vidhurapaṇḍita Jātaka* refers to cloth-merchants and goldsmiths along with various other urban institutions.[9] Another *Jātaka* story gives a list of eighteen companies of men, including masons, painters, blacksmiths, carpenters and men skilled in various arts and crafts.[10] The description of the pomp and luxury in certain sections of the town[11] points towards the emergence of a new class whose demands and requirements were completely different from those of the earlier age and it was this class which was instrumental in providing impetus to the growth of various craftsmen in cities such as weavers, masons, goldsmiths, jewellers, perfumers,

garland-makers, incense-makers, manufacturers of musical instruments, etc. Urban setting led to the rise of many such crafts and industries whose main objective was to cater to the tastes of the nascent sophisticated class.

Pāṇini gives a long list of industries and crafts connected with fine arts, pottery, carpentry, dyeing, dress and garments, both woollen and cotton, gems, metals such as gold, silver, iron and tin.[12] The classical writers also describe various industries like gem industry, leather industry, etc.[13] Kauṭilya's *Arthaśāstra*, which purports to give a picture of the Mauryan times, contains a long list of industries which had attained a high degree of specialisation. Mineral products like gold, silver, diamond, gems, pearls, metals, salt, etc.,[14] played an important part in the economy.[15] In the chapter on 'Buildings within the Fort', Kauṭilya refers to the separate allotment of areas in a town to different classes including merchants trading in scents, garlands, grains and liquids, along with expert artisans.[16] Here it is significant to note that the *Arthaśāstra* advocates the state's monopoly over all the economic activities and as a result most of these industries came under the direct control of the state and others were kept under strict royal supervision.

The period of the Kuṣāṇas coincides with the most mature phase of urbanisation in early India,[17] a fact which is reflected by a proliferation of arts and crafts during this period. The *Milindapañho* provides a list of 75 occupations,[18] out of which nearly 60 were connected with various kinds of crafts. Some of the occupations and crafts mentioned in this text had a basically rural background but their mention here suggests that they had become a part of urban economy as well. A somewhat similar picture of urban professions and crafts emerges from another contemporary Buddhist work, the *Lalitavistāra*. The description of lofty mansions, golden networks and ornaments, oil, molasses, sugar, musical instruments, vessels made of costly metals and stones, dresses of different varieties of cloth dyed in various shades and similar other details[19] probably indicates that crafts like goldsmithy, mining, weaving, dyeing, tailoring, garland-making, perfumery, etc., flourished during that period.

The Buddhist *Avadānas*, like the *Mahāvastu*, the *Divyavadāna*

and the *Avadāna Śataka*, compiled during the first four centuries of the Christian era, add further to our information gathered from the *Jātakas*. Two identical passages in the *Mahāvastu*[20] enumerate professionals and guildmen assembled at Rājagṛha and Kapilavastu.[21] The *Aṅgavijjā*, a Jaina Prakrit text originally compiled in the Kuṣāṇa period and improved upon in the Gupta period,[22] also contains an account of urban professions and crafts. It mentions five kinds of professions including trade and commerce and arts and crafts[23] and gives a long list of professionals and craftsmen.[24]

The *Kāmasūtra* of Vātsyāyana, a work of the Gupta period, gives the picture of a highly sophisticated urban society in which numerous arts and crafts were patronised by the city dwellers. The author enumerates sixty-four arts which provide a glimpse into the urban industries.[25] Although Vātsyāyana recommends these arts for the *nāgaraka*, it can be presumed that those proficient in these arts could adopt them as their means of livelihood. The *Mṛchchhakaṭika* of Śūdraka, a work of the same period, gives some idea of the artisans and craftsmen who inhabited the city of Ujjayinī.[26]

The *Dhūrtaviṭasamvāda* and the *Ubhavābhisārikā* describe Pāṭaliputra as a town of madding crowds, lofty buildings, perfumed streets, and large-scale commodity exchange.[27] The *Pādatāḍitakam* describes various artisans and craftsmen working in their workshops in the markets of Ujjayinī. It refers to the different sounds coming from the workshop of carpenters, from the whetting of bronze, or from the finishing given to conch-shells with iron instruments.[28]

Here it will be pertinent to note that our law-books are of not much help in this direction presumably because they were opposed to urban life. To these law-givers, the city with its dust, luxuries and ostentation was not a fit place to live in. Nevertheless, in laying down rules and regulations pertaining to apprenticeship, trade, profession, etc., they throw some light on urban economy also. Manu ordains that "learning, mechanical arts, work for wages, service, rearing cattle, traffic, agriculture, contentment, alms and receiving interest on money, are the ten modes of subsistence (permitted to all men in distress)".[29] Most of these professions had better prospects in urban setting. Manu,[30] Yājñavalkya,[31] Vaśiṣṭha,[32] Viṣṇu,[33]

Gautama[34] and others have mentioned various chemicals for cleansing precious metals and stones. The very fact that alkaline, acid or acidulated water was being used for cleansing gold, silver, etc., points to a specialised industry of metal and gem workers. Certain professionals are also mentioned in the law-books. Manu asks the king to banish from the city persons like gamblers, dancers, singers, cruel men, persons selling wine, etc.[35] This provision indicates their existence in the cities. The rules regarding apprenticeship also throw some light on urban economy.[36]

These literary evidences can be corroborated by the various epigraphic and archaeological sources. The material relics discovered from the various archaeological sites of northern India in the shape of pottery, terracotta objects and figurines, metal, coins, stone, ivory, glass objects, plaques and scriptural pieces depicting costume, coiffeur and ornaments, copper, gold and iron objects, etc., attest to the existence of various crafts during this period. Some of the inscriptions also refer to engineers (*navakarmikāḥ*),[37] actors,[38] perfumers,[39] goldsmith,[40] big merchants,[41] *sārthāvaha*,[42] cloak-markers,[43] etc.

The above discussion amply illustrates the prospering condition of numerous crafts and occupations during our period. Whereas agriculture, cattle-rearing and certain small crafts connected with land, forest and animals, with limited scale and localised scope of consumption, were the chief features of rural economy, urban economy was dominated by a large number of professionals and craftsmen who produced for wider circulation and greater consumption. The groups of professionals and tertiaries had either no economic role to play and, even if they had any, it was mainly marginal to the main system. Hence we may categorise urban industries under the following heads :

(a) Textile industry
(b) Carpentry and wood-working
(c) Metal-working
(d) Stone-working
(e) Glass industry
(f) Bone and ivory working
(g) Perfumery

(h) Liquor and oil manufacturing
(i) Leather industry
(j) Clay-working like pottery, terracotta figurine-making, modelling, brick-making, etc.
(k) Other miscellaneous industries.

(a) *Textile Industry*

That the textile industry was well established by *c.* 600 B.C. is obvious from the mention of a variety of clothes in the various *Dharmasūtras.* The *Sūtras* do not give a detailed description of the various aspects of this industry but the *Pāraskara Gṛhyasūtra* tells about spinning and weaving, stretching the warp and crossing the woof.[44] For manufacturing finer clothes the cloth was rubbed with *ghee.*[45] Besides making upper and lower garments, turbans, articles like blankets too were commonly woven.[46] The *Dīgha Nikāya*, however, furnishes a long list of different varieties of textile products, e.g., *gonako* (goat's hair coverlets). *chittika*, *paṭika* (white blankets), *patalika*, *tūlika* (quilts stuffed with cotton), *vikatika* (with figures of lions, etc.), *uddalomi* (with fur on both sides), *ekantalom* (with fur on one side), *koseyam* (silken) and *kuṭṭakam* (carpets long enough for sixteen dancers), etc.[47] Separate references to weaving and spinning industries in this period indicate a further division of labour. Moreover, on the basis of the aforesaid varieties of textile products we may assume that specialisation probably created new classes of textile workers like the embroiderers, workers in rugs and furs, etc.

Pāṇini provides a somewhat detailed description of the various processes of weaving. He refers to the mechanical devices like *tantra*[48] (loom) and *pravāṇi*[49] (shuttle). He also refers to three varieties of blankets : *prāvara*,[50] *pāṇḍukambala*[51] and *paṇyakambala*.[52] The *pāṇḍukambala*, according to the Kāśika, was of a very high quality and its use for royal seats indicates that weavers of this period had attained a high standard.[53]

Keeping in tune with the Mauryan policy of royal control over all spheres of human activity, the textile industry too was brought under the purview of the state. There was a separate

department of textile under a superintendent of weaving, called *sūtrādhyakṣa*.[54] His duty was to employ qualified persons to manufacture threads, coats, and cloths. He also made arrangements for those who were needy. Thus it is laid down :

> Widows, crippled women, girls, mendicant or ascetic women, women compelled to work in default of paying fines, mothers of prostitutes, old maid-servants of the king, and prostitutes (*devadāsis*) who have ceased to attend temples on service shall be employed to cut wool, fibre, cotton, panicle (*tulā*), hemp and flax [55]

It is further laid down :

> Those women who did not stir out of their houses (*aniṣkāsinyaḥ*), those whose husbands are gone abroad, and those who are crippled or girls may, when obliged to work for subsistence, be provided with work (spinning of thread) in due courtesy through the medium of maidservants.[56]

These recommendations of Kauṭilya were double-edged in purpose. Firstly, he was making available to the state labour at a relatively cheap rate by advocating for the employment of those who were certainly not in a position to assert for their labour charges. This was in keeping with the exploitative nature of the Mauryan state. Secondly, he was providing employment to certain alienated sections of society like prostitutes, widows, etc. The emergence of certain categories of alienated women is a typical feature of the urban society. Kauṭilya being a thorough observer could not have missed this point, and hence he made arrangements for their survival in keeping with the urban tradition.

Generally three varieties of cloths were manufactured—wool, silk and cotton. The *Arthaśāstra* mentions a large number of animals whose furs and skins were used for manufacturing woollen cloth. Blankets were made either by fastening borders or were woven so as to have coloured designs. Nepal and Bhutan were producing probably very fine quality of blankets.[57] Kauṭilya also refers to silk industry. Some of the important terms mentioned by him for silk are *patroṇṇa*, *kauśeya*, *china-*

paṭṭa, chīnaṁśuka, paṭṭāṁśuka and *chīnakauśeya*.[58] He further informs that *patrorṇa* was obtained from *Magadha, Puṇḍra* and *Suvarṇakūḍya*. The *Arthaśāstra* also mentions that Madhurā (Madura), Aparānta (Konkan), Kalinga, Banaras, Vanga (East Bengal), Vatsa (Kauśāmbī) and Mahiṣa (Jabalpur) were the centres of manufacture of finest cotton cloth.[59] The state took initiative in growing cotton, and linseed was probably used for making *kṣauma* cloth.[60] Though Kauṭilya has not thrown much light on the making of ornamental robes, Megasthenes' description that : "Their robes are worked in gold and ornamented with precious stones, and they wear also flowered garments made of the finest muslin",[61] indicates that some of the textile workers had achieved a high degree of perfection in their craft.

The post-Mauryan phase with its greater degree of urbanisation witnessed higher achievements in the field of textile industry also. The fine Indian muslin formed an important item of export and was almost a competitor of Chinese silk in the Roman markets. The contemporary literary sources contain numerous references to weaving, washing and dyeing of clothes and cloth made of cotton, linen, hemp, silk, etc. The *Mahābhārata* also refers to the art of mixing cotton with wool and silk, as is apparent from the word *akārpāsaṁ* (unmixed with cotton) [62] The *Jātakas* refer to various groups of professionals like tailors, weavers and washermen who were connected with the textile industry.[63] The Banaras cloth seems to be the *bete noire* in this period.[64] A host of contemporary texts throw interesting light on the textile and its ancillary industries[65] suggesting their flourishing condition.

The textile industry supported a large number of tertiary artisans like tailors, washermen, embroiderers, etc. Banaras, along with Mathurā, were the centres of cotton cloth. Patañjali refers to a special kind of cloth *setaka* prepared at Mathurā.[66] Later, Hsuan Tsang also took notice of the fine quality of cotton produced at Mathurā.[67] It appears that by this time Bengal too had attained a high degree of perfection in the field of textile manufacturing. Periplus records the export of Bengal muslin.[68]

Besides cotton, the wool industry was also quite flourishing. There are reasons to believe that wool from north-western India was sent to Egypt and Syria in the early Christian era.[69]

Manu too makes pointed references to this industry. He mentions the word *kūlapa*[70] which has been explained by Kulluka as soft blanket from Nepal. This indicates the continuance of the Indo-Nepalese trade for Nepali blanket was very popular even during the Mauryan period.[71]

The silk industry was equally popular in this period. Although G.L. Adhya seems to think to the contrary,[72] it can be asserted, on the evidence of the *Arthaśāstra* and the existence of wild variety of mulberry in north Bengal and Assam,[73] that silk industry is indigenous in origin. The influx of the Chinese silk through the north-western and north-eastern trade routes must have provided an impetus to the Indian silk industry and consequently silk from India along with the better quality from China was being exported to Rome in the early Christian era.[74]

Archaeological and epigraphic records bearing on textile industry are sparse, nevertheless they bear testimony to a number of developments in this field. The sculptural representations at Bharhut, Bodhgaya, Amravati and Sanchi reveal that quality garments were used by the people during the period. The stone discs from Murtajiganj (Patna City) also contain beautiful designs and in all probability these were used for printing cloth in the 1st-2nd centuries A.D.[75] Plasticine impressions reproducing the designs of cloth used have exposed a series of loosely woven fabrics of both coarse and fine quality. The materials used were cotton, linen and jute.[76] Moreover, during the excavations at Rangmahal (Rajasthan), a few pieces of pottery with internal textile impressions, indicating the textile designs current in Rajasthan in the late Kuṣāṇa period, were noticed. Another type of archaeological evidence is forthcoming from some of the Kuṣāṇa sites like Saikhan Dheri,[77] Taxila (Sirkap)[78] and Hastināpur[79] in the form of spindle whorls discovered from there. Weavers and dyers are also referred to in some epigraphic records. An inscription from Mathurā records a dedication by a *rayagini* (wife of a washerman or dyer).[80] This dedication suggests that at least some persons connected with this industry had become sufficiently rich.

The textile industry was highly developed in the Gupta period as can be noticed from the contemporary archaeological and literary evidences. The *Amarakośa* refers to weavers,

their looms and the act of weaving.[81] The text also gives different terms not only for cloth in general but also for finer as well as coarser kinds of cloth.[82] Kālidāsa also refers to distinct types of garment worn by different classes of people. Weavers manufactured both finest and coarsest varieties of cloths.[83] From the references to the silk weaver's guild of Mandasore, it is evident that many people were engaged in silk production and the guild had become quite resourceful.[84] The Chera and Pāṇḍya kingdoms exported silken cloth while the Chola kingdom sent muslin.[85] Fahien records that after necessary carding and cleaning of wool and fur skilful weavers prepared warm clothing and blankets of different kinds. He also refers to the use of hair-cloth by the rich in Ladakh.[86] Nārada refers to blankets made of the hair of the mountain goat.[87]

Thus during the Gupta period textile industry was quite developed. The transparent garments represented on the Gupta images testify to the fine quality of fabrics produced during the Gupta period. That the textile industry was heading for a shock is beyond doubt. No doubt, the silk trade of India with the Byzantine continued till the middle of the 6th century A.D.,[88] but once the Byzantinians learnt from the Chinese the art of growing silk, they hardly needed to import the same from India and China.[89] This must have badly affected the textile industry in contemporary India.

(b) *Carpentry and Wood-Working*

Carpentry as an important industry was well established by the beginning of our period. Whereas in the Ṛgvedic period one single term *takṣan* denoting a carpenter covered all those engaged in manufacturing of ploughs, carts, chariots, household furniture and various other articles in wood,[90] by the later Vedic times technical developments in the field led to a division of functions. In the *Baudhāyana Śrauta Sūtra* the carpenter and the chariot-maker are referred to differently.[91] The chariot-maker (*rathakāra*) was such an important member of the society that he was allowed to perform the *Śrautra* sacrifices. He could consecrate the sacred fire and was eligible for *upanayana* which gave him the status of a twice-born.[92] This is quite understandable in a society dominated by war and lack of

communication facilities.

During the days of the Buddha a novel development took place in the industrial field. Certain industrial villages peopled by persons of one single craft sprang up in the vicinity of towns. In fact, these were certain crafts needing a rural surrounding for their proper development. There is a reference to a settlement of carpenters near Banaras, which has been described in a *Jātaka* as follows: "They would go up the river in a vessel, and enter the forest, where they would shape beams and planks for house-building and put together the framework of one-storey or two-storey houses, numbering all the pieces from the main post onwards; these then they brought down to the river bank, and put them all aboard; then rowing downstream again they would build houses to order as it was required of them. After they received their wages, they went back again for more materials for building, and in this way, they made their livelihood." Besides depicting the hard labour involved in carpentry, the above passage expressly reveals that their services were greatly required for building purposes. In a society which had begun to taste the fruits of urbanisation and where burnt brick was yet to be used for architectural purposes, naturally wood and the worker in wood became important for society. Moreover, this was the period which witnessed the gradual expansion in the use of iron in the agricultural field leading to deliberate deforestation and consequent availability of wood in large quantities. This too might have given a fillip to the trend towards building houses of wood.

The profession of the *vaddhaki* (carpenter) further developed in the Buddhist period. His craft had reached a high degree of technical proficiency. It has been recorded that a carpenter made a mechanical elephant of wood, under whose belly sixty men could walk back and forth, a large number of men worked on the machinery and fitted it into the belly of an elephant.[94] A similar story refers to another instance where a highly gifted wood-worker carved out a wooden Garuḍa, fitted it with a machine, seated his family in it and took off into the air in order to save his life from a deceitful king.[95] Though these stories are purely imaginative and fanciful, they do attest to the proficiency attained by carpenters and associate mechanics in their craft.

The carpenter, in this period, had to perform various functions. He fashioned spokes, rims, naves and all other parts of wheels and carts.[96] As most of the houses, including the palace of Ajātaśatru, in this period were built of wood, there were no separate masons but the functions of masons and carpenters were combined in the same person.[97]

Pāṇini also makes pointed references to the craft of carpentry. Some carpenters were patronised by the king and were not allowed to undertake any private work at home.[98] Besides the carpenters employed in the king's service, there were others who carried on their trade independently. This can be inferred from a *sūtra* of Pāṇini.[99] These carpenters have been referred to as *kauṭa-takṣās*.

An important aspect of wood-worker's craft was ship-building. Buddhist sources are replete with references to large and small ships. Pāṇini too refers to boat ferry which was called *navya*.[100] The price of ship was so high that the merchants were valued in terms of the number of cargo-boats they possessed.[101] The accounts of Alexander's Indian campaigns, furnished by Arrian, Curtius and others, also indicate that ship-building was a flourishing industry in that period. The *Arthaśāstra* refers to various ships, big or small, sailing on oceans, mouth of rivers, etc.[102] Under the centralised politico-economic administration the Mauryas, the ship-building industry was the monopoly of the state, as has been indicated by Megasthenes and Strabo. They have also referred to ships built in royal shipyards as being hired out to passengers, sailors and merchants.[103]

As wood dominated the building scene the highest degree of perfection achieved by carpenters in the Mauryan period was in the field of architecture. Strabo tells us that Pāṭaliputra was girt with a wooden wall, pierced with loopholes for shooting arrows.[104] According to Arrian, all the cities situated on the banks of rivers or on seashores had constructions of wood instead of bricks.[105] Kauṭilya too provides several measures to check fire.[106] The high degree of perfection which the craft attained during the period is attested to by the large wooden platform that has been unearthed at Kumrahar in the vicinity of Patna. "The platform", reports Dr Spooner who made the discovery, "was found to be merely a solid

accumulation of logs. But the neatness and accuracy with which it has been put together, as well as the preservation of the ancient wood, whose edges were so perfect that the very lines of jointure were indistinguishable, evoked the admiration of all who witnessed the experiment. The whole was built up with a precision and a reasoned care that could not possibly be excelled today . "[107]

The professional prosperity of carpentry continued in the post-Mauryan period because of the extensive use of timber as building material, household furniture, chariot and boat. The *Aṅgavijjā* makes copious references to various wooden objects like *āsanadāna* (sedan chair), *janaka* (car), *gholī* (horse palanquin), *sagada* (bullock cart), *sagadi* (small bullock cart), etc. The text also refers to several types of timber-made boats like *nāva*, *pota*, *koṭṭimba*, *salika*, *ṭappaka*, *plava*, *piṇḍika*, *kaṇḍevelu*, *dati*, etc.[108] The *Periplus* besides referring to *trappaga* and *cotyamba* types of boats also mentions large vessels each made of a single log bound together and known as *sangara*.[109] These references bear testimony to the craftsmanship and skill of carpenters in the early centuries of the Christian era. Some of the carpenters might have been employed by the state, for the *Aṅgavijjā* mentions the superintendent of wood (*darukādhikārika*)[110] who probably supervised the work of carpenters employed by the state.

The archaeological evidence for carpentry is not numerous mainly on account of the perishable nature of the worked material, but some sculptural representations and epigraphs do refer to carpentry. From the early Indian sculptures of Sanchi we get the representation of a canoe made up of rough planks rudely sewn together by hemp or string.[111] Similarly the caves of Kanheri too represent the scenes of ship-wreck on the high seas.[112] On the epigraphic side, an inscription of Kaṇiṣka's 12th regnal year records a dedication by a lady who belonged to the carpenter (*vaddhakin*) class.[113] This dedication suggests a high status attained by the carpenters. Evidently they gained high social status and money for dedication through their craftsmanship which was in heavy demand.

Wood-carving was well developed in the Gupta period and in the *Kāmsūtra* wood-carving is mentioned as one of the sixty-four arts.[114] Describing the house of a *nāgaraka*, Vātsyā-

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yana provides a separate room in the solitary part of the house to be exclusively reserved for wood-carving.[115] This undoubtedly reflects the popularity of this craft. Although the *Amarakośa* is silent on the actual art of wood-carving, it furnishes a somewhat detailed account about the division of carpenters and their manufacturing tools. He refers to carpenters' workshop headed by a *sthapati* under whose supervision other carpenters worked.[116] The importance of the carpenter is also shown in the *Mudrārākṣasa* which, though purporting to deal with Mauryan affairs, no doubt reflects to a great extent the Gupta conditions; here Chāṇakya mobilises all the carpenters of Pāṭaliputra to construct the palace and city gates for the entry of Chandragupta during the time of coronation.[117] They are referred to as decorating the palaces and gates with beautiful carvings.

Besides making furniture and other objects of utility, the carpenters also made large images in wood. Fahien records that the people of Darel, on the western bank of the Indus, worshipped a Buddha image which was eighty cubits in height and eight cubits at the base from knee to knee.[118] Such a figure must have required considerable skill in woodcraft, even allowing for probable exaggeration.

Like timber, bamboos and canes were also used for building materials and household furniture. Vātsyāyana includes the manufacture of furniture from canes and reeds in the list of sixty-four arts.[119] Kālidāsa refers to cane chairs (*vetrāsana*) offered to guests.[120] Moreover, in Fahien there is a reference to a five-storeyed bamboo structure upon a four-wheeled car, used in procession on certain festive occasions which was about 20 cubits high.[121]

In spite of such perfection in different fields of carpentry, the art of ship-building does not seem to have attracted the same attention. References to ship-building are few and far between in the contemporary sources. Fahien tells us that he travelled from Ceylon to Java in a ship carrying 200 people.[122] Two representations of ships are also forthcoming from the cave temples at Ajantā—a sea-going vessel of a three-master and a royal pleasure boat.[123] The general impression that one gets is the gradually declining condition of Indian ship-building industry from the later Gupta period. If one keeps

in mind the languishing trade in this period, this development in the ship-building industry will seem to be a natural corollary to the former.

(c) *Metal-Working*

Metal working antedates the beginnings of early historic urbanisation in India. In fact, one of the fundamental factors responsible for the second phase of urbanisation was the increasing use of iron, a fact well illustrated by both literary and archaeological sources. The *Baudhāyana Śrauta Sūtra* makes separate references to goldsmiths and blacksmiths.[124] Describing the *Pratyavarohaṇa*, Baudhāyana enjoins that people should bedeck themselves with ornaments at the beginning of every season.[125] Such instances are forthcoming in large numbers from the contemporary sources indicating the widespread use of gold ornaments and consequently the wide prevalence of the craft of goldsmith.

The *Sūtras* also refer to blacksmiths and various articles of iron, copper and bell-metal like ploughshares, spades, sickles, needles, knives, utensils and razors.[126] This indicates the growing dependence of agriculture on iron technology. But archaeology has a different story to tell. It is true that iron appeared in the northern part of India at the beginning of the 1st millennium B.C. but they were generally weapons. Although this discovery coincides with numerous references to this metal in the later Vedic texts, the discovered objects comprise arrow-heads and spear-heads supplemented by nails.[127] Thus it seems that in the first phase in India iron could not be extended to production because of its paucity and primitive technology; it only strengthened the exploitative powers of the organisers of production.

The period from *c.* 600 B.C., however, covered new ground in the field of metal technology. From this period iron came to be used for clearance of forests, for making wheels and the body of carts and chariots, for making agricultural tools, etc. This widespread use of iron not only revolutionised the economy but also established the utility and predominance of iron technology in the society which certainly helped the advancement of the techniques of smithy. This growing use of iron

was further facilitated by the use of bellows. Although in one text it is stated by way of a simile that a ploughshare is heated through the whole day, suggesting thereby the absence of bellows, several texts of the period clearly refer to the use of bellows.[128] The importance of its introduction has to be emphasised because it made possible the introduction of iron tools and implements on a large scale.

The *Dīgha Nikāya* tells something about the processes involved in a blacksmith's work.[129] In the *Dhammapāda* commentary, the arrow-makers are said to have heated reeds and sticks over the fire and straightened them by looking along their length.[130] The contemporary texts also refer to other categories of metal-smiths (*kammāra*). In one context, he is the person to whom a man finding a gold-ring may go in order to check its worth.[131] He is thus equated with *suvaṇṇakāra*, the gold-smith. Chunda, who is a *kammāra-putta*, is a rich man owning a mango-grove. It was at this place that the Buddha had his last meal.[132] Chunda's opulence was not unnatural since his craft involved dealing in gold, the most prized metal at that time. At another place a bronze vessel (*kaṁsapāti*) is sold in a smith's shop.[133] He is described as belonging to a family (*kummārakula*), a distinction which is usually reserved for a man of substance or status (except in cases where poverty and low status are contrasted with wealth and high social status).[134] Thus the smiths enjoyed a high status in the society mainly because of the utilitarian nature of their craft.

Under the Mauryas, the industry of metal-working made rapid progress mainly on account of complete royal control over it. Kauṭilya has provided for a superintendent of mines (*ākarādhyakṣa*), who was expected to possess thorough knowledge of the technical aspects of mining, including metallurgy.[135] The *Arthaśāstra* suggests that gold, silver, copper, lead, tin, iron and bitumen were worked. But, except for the mining of copper and gold, the archaeological evidence is scanty. It has been suggested that the copper and gold mines in Dhalbhum in Chotanagpur were worked from the time of Chandragupta Maurya. The nearest copper mines to the Maurya capital Pāṭaliputra are those of Baragunda in the Hazaribagh district and Singhbhum, and probably they supplied at least some copper vessels used at the court.[136] Since numerous heaps of

iron slag are to be found scattered all over the iron belt in south Bihar, these may have been the refuse of local iron smelters.[137]

Literary testimony hardly leaves any doubt about the working of iron, for *loha* (iron) in its various forms is mentioned far more frequently in the *Arthaśāstra* than *tāmra* (copper). The *lohādhyakṣa* was the officer in charge of iron working. The same text alludes, in detail, to the properties of innumerable metals and classifies them into different varieties. This is a positive indication that mineralogy had advanced beyond the elementry stage.

Similarly there was an officer who looked after the work of goldsmiths. Kauṭilya has given a detailed account of the processes involved in purifying both silver and gold from their respective ores.[138] He has also furnished a detailed account about the methods used by goldsmiths to manufacture ornaments. The description of several qualities of pearl necklaces of which some required 1008 strands of pearls, bracelets, anklets and waist-bands requiring a high degree of craftsmanship, indicates that the goldsmiths of the period were highly talented in their art.[139] The discovery of fine jewellery from the Bhir Mound (*c.* 250 B.C.) lends credence to V.A. Smith's observation that "the beads, jewellery and seals of the Maurya period and earlier ages which have been found from time to time prove that the ancient Indian lapidaries and goldsmiths were not inferior in delicacy of touch to those of any other country".[140]

The post-Mauryan period witnessed a remarkable growth in the various spheres of metal industry. The *Milindapañho* mentions eight crafts associated with the working of mineral products, gold, silver, lead, tin, copper, brass, iron and precious stones or jewels.[141] In particular, technological knowledge about the working of iron had made considerable progress.[142] The *Rāmāyaṇa* also refers to the process of smelting iron.[143]

Some of the contemporary inscriptions record donations made by blacksmiths. The Mathurā Kankali Tila Jain image inscription of Kaṇiṣka's reign records donations by a daughter-in-law of a *lohakāra* who was the daughter of a *maṇikāra*.[144] The record makes it evident that blacksmiths had acquired high status in society due to their skill and wealth earned through it, so that a *lohakāra's* son could marry a jeweller's daughter and the latter could make donations. The prosperity of iron-

smiths is further attested by the *Periplus of the Erythraean Sea* which refers to the export of Indian iron and steel from the Gulf of Cambay to the African coast.[145]

Excavations at many contemporary sites have yielded iron objects, crucibles and slag which suggest iron working. Besides other objects, a broken double-edged straight sword has been discovered from the Saikhan Dheri site.[146] Marshall groups the iron objects from Taxila into five classes, namely, household utensils, arms and armour, horse bridles and elephant goads, carpenters' and blacksmiths' tools, and agricultural implements.[147] Other important sites which have yielded smelting furnace with iron slag, crucibles and different tools and implements are Noh,[148] Purana Qila,[119] Kurukṣetra,[150] Hastināpur,[151] Mason,[152] Kauśāmbī,[153] Vaiśālī,[154] Kumrahar,[155] Sonpur,[156] Saradkel,[157] Buxar,[158] and Chirand.[159] All these evidences amply illustrate the thriving condition of ironsmithy in this period.

Next to iron,. bronze, copper and gold seem to have been more commonly used. Though the *Jātakas* do not refer to coppersmiths, other contemporary texts like the *Milindapañho* refer to them. These sources also refer to bronze and brass smiths [160] These were used mainly for coins, statues, articles of toilet, ornaments, etc. These texts make copious references to gold ornaments and proficient goldsmiths: they, however, seldom mention silver. Probably silver was not easily available. Interesting details about goldsmithy come from the *Saundarananda* which refers to the process of gold-working and various kinds of ornaments.[161] Most of the contemporary texts refer to jewellers as distinct from the goldsmiths. It appears that there was a separate class of jewellers who manufactured only ornaments, and that goldsmiths worked exclusively in gold. Both goldsmiths (*suvarṇakāra*)[162] and jewellers (*maṇikāra*)[163] have been referred to in the contemporary epigraphs.

Archaeological evidence regarding copper and gold is forthcoming from different contemporary sites. Kuṣāṇa copper and gold coins along with several moulds of gold coins have been discovered from these sites. Other copper objects discovered include ornaments, toilet articles, surgical and other instruments, etc.[164] Some bronze objects have also been discovered from Sirkap and Mathurā.[165] The archaeological evidence for gold and silver is, however, not so abundant. Gold coins of different

Indo-Greek kings and a few Kuṣāṇa coins including one of Wema Kadphises used as a button have been found at Saikhan Dheri.[166] Silver and gold objects of diverse use, especially ornaments with foreign influence, were noticed at Taxila (Sirkap).[167] Apart from these coins, a standing human figurine in the Kusāṇa Mathurā style from Vaiśālī[168] is of special interest.

The metal industry continued to be in a flourishing state during the Gupta period. The *Amarakośa* gives a comprehensive list of metals, including gold, silver, copper, iron, brass, lead and tin.[169] The art of metal-worklng was fully developed at that time, for it has been listed as one of the sixty-four arts in the *Kāmasūtra*.[170]

The ironsmiths were the most important group of metal workers. Among their manufactures are mentioned useful implements, like spades, sickles, ploughshares, chains, iron-plates and pans, swords and various other weapons.[171] Among iron objects of the Gupta period the archaeologists have discovered traces of hammers,[172] different types of chisels,[173] a padlock,[174] a plate of iron with holes,[175] a door ring,[176] a spoon,[177] a dagger,[178] a hatchet,[179] etc. But the Mehrauli iron pillar of king Chandra reflects the high water-mark of craftsmanship in iron working. It is over 23 feet high with a diameter of 16 4 inches and is more than six tons in weight. It is a single piece of iron. The most remarkable feature of this pillar is that, although it has been exposed to the weather for hundreds of years, it did not rust and retains its inscription very clearly. To manufacture this huge monolithic non-rustible pillar required a very large iron foundry and a group of highly skilled iron workers. Sultanganj copper image of the Buddha, now preserved in the Birmingham Museum, is another example of the metallurgical expertise in the Gupta period.

The work of goldsmith was also highly specialised. In the *Kāmasūtra*, *rūparatnaparīkṣā* (testing and valuing of precious stones), *dhātuvāda* (combination and purification of metals) and *maṇirāgakarajñānam* (knowledge of precious stones, etc.) are included in the list of sixty-four arts.[180] Although we have very few specimens of jewellery unearthed from the Gupta sites, yet from the painted, carved and moulded figurines, and from the fairly elaborate descriptions of Kālidāsa, one gets a fairly good idea of the jewellery in this period. Moreover, the

high intrinsic value and aesthetic quality of old and silver coins also suggest that gold and silver working had reached a high water-mark of excellence in execution and design. The Bhiṭā excavations have yielded one gold ring, one hollow gold bead, two miniature gold beads joined together, a disc of gold embossed with a human face, besides other things.[181] On the epigraphic side, the Mandasore inscription of Kumāragupta and Bandhuvarman refers to women wearing necklaces.[182] The Malia copper plate of Dharasena II refers to the hair ornaments of the subdued kings.[183] Coins are also illustrative on this point. The general picture that emerges is one of a thriving metal industry in our period.

(d) *Stone-Working*

The working in stone was one of the most important industries of ancient India. Objects like household utensils, architectural objects, ornaments, statues and beads were made of precious and semi-precious stones. The *Jātakas* reveal that the stone-cutters—*pāṣāṇakuṭṭakas*—were very skilled at their work. They are referred to as not only quarrying and shaping stones, but as highly deft at making a cavity in a crystal and setting it in some object which could kill any creature which approached it.[184] The account clearly indicates that for such a mechanism, they must have invented superior tools. The stone-workers also made flight of steps leading into a house or down into reservoirs, carved pillars and bas-reliefs and even did finer works such as making crystal bowls. Beautiful examples of the latter are found in the Śākya *stūpa*.[185]

The only architectural remain of this period which throws some light on this topic is the fort wall of Rājagṛha of the time of Ajātaśatru built of heavy boulders. This wall has a circuit of about 25 miles along the crest of low hills which surround the site of the city. The wall, about 12 ft thick and 10 ft high, is faced with rough massive blocks in dry-stone walling and has occasional salient bastions. The most ancient outer wall may date back to the 6th century B.C. and is a compliment to its builders.

The general use of stone for building, sculpture and decorative purposes became quite common from the reign of Aśoka.

The art of his time, as seen in the pillars and capitals, is a mature one. The columns themselves are monoliths of enormous size, the heaviest weighing about 50 tons. The capital of each pillar comprised three members, which are most clearly marked in the Sāranāth capital which crowned the column raised in the deer park where the Buddha delivered his first sermon. "The lowest member of this richly decorated capital is an inverted lotus, bell-shaped, with its petals indicated by bold fluting of its entire surface. Above it is an entablature with a frieze bearing sculptures in very high relief with the plastic qualities of sculptures in round; they comprise four animals, an elephant, a galloping horse, a humped bull, and a lion representing respectively the east, south, west, and north, a symbolism traceable to Vedic sources. The four animals are separated by as many wheels (*chakras*) in the interspaces. At the summit of the capital there are four lions, or rather, the forequarters of four lions, standing addorsed, which carried on their backs, to crown all, a stone wheel, 2 feet 9 inches in diameter, of which only fragments remain."[186]

The Sāranāth capital is the product of the most developed art of which the world was cognisant in the third century B.C. —the handiwork of one who had generations of artistic expertise and experience behind him. Thus to point out the high degree of perfection achieved by the stone-cutters in this period remains a simple academic issue.

Equally masterful reflection of the work of these stone-cutters comes from the palace at Pātaliputra. Fahien, who visited India in A.D. 393-441, was very much impressed by this structure. Thus, he records, "The royal palace and halls in the midst of the city, which exist now, as of old, were all made by spirits which he employed, and which piled up the stones, reared the walls and gates, and executed the elegant carving and inlaid sculpture work, in a way which no human hands of this world could accomplish."[187]

The passage is quite explicit from the point of art, technique and proficiency of the stone-cutters during the Mauryan period. John Marshall seems very near the point when he says that "the style and technique of stone-cutters presented in their carvings were incomparable in the ancient world".[188] This indicates the developed nature of the art of stone-cutters and

we can presume that this industry along with the workers connected with it must have attained considerable importance.

The stone industry seems to have been in a very thriving state during the post-Mauryan period. References to stone and its use are presented in the *Lalitavistara*, *Saddharma Puṇḍarika*, *Mahāvāstu*, etc. The excavations have brought to light several types of household objects. More important among them are grinding mill-stones of granite, round in shape and made up of two parts. perforated ring stone, cylindrical grinding stones or pounders, querns, whetstone and sharpner, fragments of vessels like bowls, dishes and saucers, heart-shaped lamps from Saikhan Dheri,[189] and pivot stones, mullers, stool-querns, crushing mills, trays, toilet caskets, lamps, burnishers and polishers of gold and silver articles, amulets, stones used for ornamental inlay work in wood, ivory, various moulds of ornaments and stone weights from Taxila.[190] More or less similar objects are reported from other contemporary sites. Stone ornaments like finger-rings made of precious stones and dagger-shaped pendants were recovered from Saikhan Dheri.[191] Agate was used sometimes for bangles[192] and a few pieces of bangles have been reported from Kauśāmbī,[193] Kumrahar,[194] Vaiśālī[195] and Sonpur.[196] But it seems that stone was very sparingly used for ornaments. Whatever stone ornament was used was in the form of beads which are forthcoming in large quantities from the excavated sites. These discoveries imply either local manufacture or some trading activity at these places. Very little evidence of unfinished material is available suggesting thereby the lack of local manufacturing activities. Moreover, the material, except clay, must have been brought from one place to another for bead-making, because stone and semi-precious stones in contemporary use were not available in every part of India. The beads were made in different shapes so as to meet the requirements of ornaments and suit the aesthetic sense. Etching of beads was not unknown. Some of the principal contemporary sites yielding beads of stone and semi-precious stones are Saikhan Dheri,[197] Taxila,[198] Noh,[199] Kurukṣetra,[200] Sonkh,[201] Sonpur,[202] Vaiśālī,[203] etc.

The post-Mauryan phase continued the sculptural developments in stone too. Two distinct sculptural styles developed

during this period—Gandhāra style in north-west India and Mathurā style in northern India. In these two styles were carved the statues of the Buddha, Mahāvīra, Bodhisattva and even of Kuṣāṇa kings. Architectural decorative pieces of stone are also found in large numbers from Mathurā. Some sculptural pieces belonging to this period were discovered from Saikhan Dheri. These were made of grey and brownish or blue schist.[204] Marshall's excavations also brought to light many stone sculptures from Taxila.[205] The excavations at Mathurā have brought to light many Buddha and Bodhisattva, Tīrthankara and *nāga* images, several railing pillars and other architectural pieces. So powerful was this school of art that it greatly influenced the contemporary Buddhist art in India and Central Asia.[206] Thus, it seems that the art of sculpture[207] in particular and the stone-working industry in general were well developed during this period both because of its utilitarian and aesthetic nature.

The stone-cutting industry had attained high standard in the Gupta age. Workers in stone made buildings, pillars, columns, statues and bead objects. The Buddha images are amongst the most notable creations of the period. The main characteristic of the sculpture of the period is the outward expression of internal sentiments. The Sāranāth Buddha, for example, represents the Master, enthroned and expounding his doctrine, while a band of disciples at his feet are shown worshipping the Wheel of Law: "The expression of an inner serenity and an outer compassion, the restraint and repose of the vibrant body and the divinely-lit smile on the face are executed with such mastery and skill that it stands most unquestionably as one of the noblest and the finest works of art."[208] A similar serenity of expression can be noticed in the image of the Buddha discovered at Mankuwar belonging to the reign of Kumāragupta I (A.D. 448-49). Some other images, found in certain caves like Vīrasena's cave and the Śankānika cave, belonging to the reign of Chandragupta II, suggest that the art of stone-cutting had reached the zenith of excellence in this period. The surviving temples of the Gupta period confirm this hypothesis.

In the Gupta period, diamonds, pearls, other precious stones, corals and conch-shells were also largely used and worked up as ornaments. Varāhamihira has dealt exhaustively with the

quality, quantity and prices of different types of diamonds, pearls and rubies.[209] The *Amarakośa* refers to emerald, ruby, pearl, etc.[210] Numerous such references are forthcoming from the contemporary literary texts. All this indicates that stone-cutters were well conversant with the art of using precious stones also. This increasing love for costly stones was typical of a society which was getting more and more sophisticated and feudal-minded.

(e) *Glass Industry*

Surprisingly glass has not been a popular industry in ancient India. From the extant remains it appears that glass was mostly used for making beads and bangles,[211] pendants,[212] ear-rings,[213] ear-plugs[214] and occasionally for seals, signets and rings,[215] and for other ornamental purposes.[216] Rarely do we come across glass flasks[217] and glass tiles.[218] Glass vessels, however, continued to be made and used as a valuable possession throughout the period. The use of glass has been referred to in the medicinal work attributed to Suśruṭa.[219] According to him, in the absence of other instruments the purpose can be served by crystal, glass and quartz among other things.[220]

Specimens of glass and glass objects have been unearthed from many historical sites, some of the notable ones being Bhiṭa, Nalānda, Assam, Noh, Udaigiri, Kurukṣetra, Rairh, Kauśāmbī, Rājghāt, Vaiśālī and Chirand. A new site noticed in this connection is Saidpur Bhitari near Varanasi.[221] From Durgai village in the Malakand Agency (Pakistan) have been reported some specimens and an earthen pot[222] used probably for manufacturing glass.

But these finds are not of much help in determining the period when glass-manufacturing was first started in India. The excavations at Ahichchhatrā have revealed specimens of glass from stratum VI assigned to the first century of the Christian era.[223] But the credit for yielding earliest specimen of glass belonged to Taxila. Glass tiles were reported from the Dharmarājikā *stūpa* of the times of Aśoka.[224] At Bhir Mound, which is the earliest site at Taxila, specimens of glass come from the pre-Mauryan levels.[225] The Taxila evidence clearly establishes that in the 5th century B.C. the glass industry

in India had attained a high degree of technical skill,[226] which implies a long antecedent period of evolution. Excavations at Hastināpur,[227] Rupar[228] and Śrāvastī[229] confirm this fact by yielding stratigraphic evidence in this connection. These excavations indicate that the earliest datable use of glass in India is to be placed around the beginning of the first millennium B.C.[230]

The literary evidence confirms this fact, for the term *kācha* occurs for the first time in the *Śatapatha Brāhmaṇa*.[231] This text is roughly assigned to the 8th century B.C. and allowing some time for the evolution of the knowledge of glass beads we can place the origin of glass-manufacture roughly in the 10th century B.C. In the *Mahāvagga*[232] and the *Chullavagga*[233] there are references respectively to shoes and bowls ornamented with *kācha* and other objects. The *Arthaśāstra* too has many references to glass which establish the importance this industry had come to attain by that time. The art of setting jewels in ornaments had made considerable advancement. The *Arthaśāstra* uses the term *kṣepaṇa* to denote it and gives the proportions of materials used in various types of encrusting.[234] Speaking of offences like robbery, Kauṭilya enjoins that for articles of greater value, such as vessels of copper, brass, bronze, glass, ivory, the fine termed first amercement and ranging from 48 to 96 *paṇas* shall be imposed.[235] The industry was a prosperous one and the *Arthaśāstra* while dealing with methods to replenish the treasury suggests that those who carry on trade in glass as also artisans of fine articles should be made to pay twenty *karas*.[236] These references undoubtedly indicate the better status of those who worked in glass. *Kāchakāra* who made articles of glass has been referred to in the list of men of various trades and crafts represented in the *Rāmāyaṇa* as going out with Bharata to request Rāma to come back.[237] This implies that the industry had a recognised place in society necessitating its representation. Glass seems to have been an important article of trade.[238]

Some glass articles have come to light in course of the archaeological excavations. Besides discoveries from Taxila, glass beads and bangles were unearthed at Saikhan Dheri.[239] Besides beads and banglesdiscovered at various sites, a glass factory site at Kopia, in the Basti district of Uttar Pradesh,

was noticed. The site belonged to *c.* 300 B.C.-A.D. 300, and has yielded a large number of glass fragments and lumps of unworked glass, fused lumps and sintered glass. Moreover, molten glass on earthen platters and crude glass in various stages of manufacture were also found here in large quantities.[240] The existence of indigenous glass industry is also attested to by the discovery of as many as 392 'flans' of grey coloured glass for making beads from a jeweller's shop at Sirkap.[241]

The continued existence of the industry in subsequent times is indicated by literary references to *kācha*. The *Kathāsaritsāgara* says that it is not advisable to destroy a *muktāmaṇi* for the sake of glass.[242] This suggests that *kācha* was a cheap object, a fact which is surprising if one keeps in mind its importance in the days of Kauṭilya. The above evidence also indicates some superficial resemblance or similarity of glass with gems, etc., indicating thereby the attainment of such a high degree of skill that glass articles, faithfully imitating gems, were being made with success. In the court scene of the *Mṛchchhakaṭika* the *śreṣṭhin* is asked to examine the genuineness of the ornaments in question 'for the dexterity of the artists is no doubt very great, *and they readily fabricate imitations of ornaments they have* once seen in such a manner that the difference shall scarcely be discernible'.[243] A story from *Kathāsaritsāgara* relates that a person named Śiva sold some of his glass articles to the priest who gave high price for them under the impression that they were jewels. After getting them examined the priest realised that he had been cheated and then made representation to the king accusing Śiva of cheating him by providing him false gems made of glass, coloured like real gems.[244] The story is an illuminating piece of evidence and attests to the perfection attained by Indian glass-makers in the early centuries of the Christian era.[245]

The account of Pliny confirms this stage in the evolution of Indian glass industry. At one place he says that no glass is to be compared to Indian glass because it is made from broken crystal.[246] In a subsequent passage Pliny records that the people of India by colouring crystal have found a method of imitating various precious stones, beryls in particular.[247] The authenticity of this statement of Pliny was doubted by Kisa.[248] But, a comparison of this passage with the reference in the *Kathāsaritsāgara* to the making of gems by pieces of glass and quartz

with various colours shows a surprising corroboration in the two independent sources. Now, as the dates of Guṇāḍhya and Pliny roughly correspond, there appears no reason why the statement of Pliny should not be accepted as reliable.

The study of ancient Indian glass industry is facilitated by chemical analysis of its extant specimens.[249] This gives a more scientific picture of the technical advancements made in the industry. The proportion of magnesia, potash, lime and alkali in glass as revealed by extant specimens was conducive to chemical durability of glass and checked its becoming too hard and difficult to melt.[250] The specimens from Taxila, when analysed, have shown an unusually high proportion of lead[251] and it does suggest the technological skill of glass workers in those times. Two other specimens from Taxila have been found to contain a good amount of antimony,[252] a practice current in modern times. Further, most of the specimens are free from air-bubbles,[253] which also implies an advancement of technique.

But due to the nature of the material, glass articles have not been found intact in a sufficient number to further our study. From the Bhir Mound have been recovered three complete conical flasks from pre-Mauryan levels.[254] This would suggest that the art of glass-blowing and glass-making was known to Indians from a very early time. From the Dharmarājikā *stūpa* of the Aśokan times has been found a floor of tiles of transparent glass.[255] This is the earliest specimen revealing that Indians could manufacture transparent glass The tiles are of considerable dimensions and show the high technical skill attained in moulding large glass objects. They have not sustained any fracture and devitrification and are in a good state of presevation. This implies that the art of annealing was also considerably developed, for the internal strain of such heavy glass articles cannot otherwise be removed. The two glass bangles from Hastināpur are free from weathering and decomposition and look fresh, which may suggest that they were carefully annealed after fabrication.[256]

The glass specimens recovered from different sites are of various colours, viz, white, red, deep violet, bluish violet, brown, blue, etc. Their chemical analysis has revealed that Indians were expert in the highly technical and advanced art of decolourising glass by means of manganese and colouring it

with various metallic oxides.[257] The fine colour of these glass objects together with their low specific gravity further suggest that Indians had advanced knowledge of the chemical aspects of glass technology.[258]

(f) *Bone and Ivory Working*

Apart from stone, metal and glass the working in bone and ivory also developed in ancient India They were used for the manufacture of domestic objects as well as luxurious goods and weapons.[259] Some of the important bone objects were combs, hair-pins, bangles, dice, handles of mirror, furniture, decorative pieces, small boxes of ivory, arrow-heads, short daggers, harpoons and styluses. In the literary texts Banaras is referred to as the main centre of this craft, where the craftsmen inhabited a particular locality named *Dantakāravīthī* (ivory workers' street).[260] Some professional ivory dealers of Banaras went to forests, hunted elephants and supplied the industry with ivory.[261] The ivory workers while pursuing their craft kept in mind the class divisions in society and, hence, manufactured bangles and various kinds of ivory ornaments for the use of the common people and costly carvings and precious ornaments for the rich.[262] The *Rāmāyaṇa* also indicates that the aristocracy had a great liking for articles inlaid with ivory. The palace of Kaikayī was full of stools and seats made of ivory.[263] The arch of Kumbhakarṇa's palace was decorated with ivory-inlay work. The legs of his couch too were inlaid with ivory.[264] It follows from the above evidences that the ivory workers of the early centuries of the Christian era had become highly specialised in their work.

Objects of bone, shell and ivory have been discovered from many excavated sites. The best specimens of ivory work are represented by the finds at Begram and Taxila. The excavations by a French archaeologist at Begram, the summer capital of the Kuṣāṇas, brought to light a large hoard of ivory objects of Indian origin. These were in the form of plaques (nearly 600 in number) depicting toilet and adornment scenes, dancing scenes and musical instruments, scenes of hunting and representations of mythical figures, animals, birds and architectural background. The most striking feature of these plaques is the complete absence of male figures on them which may be taken

to suggest that they belonged to toilet delineating private harem of the royal household.[265] These plaques, assigned to c. 1st-2nd centuries A.D., were perhaps locally manufactured with the help of distinguished ivory carvers from Mathurā. Ivory, shell and bone objects were also discovered in the north-west from Taxila and Saikhan Dheri, in north India from Rupar,[266] Noh,[267] Kurukṣetra,[268] Purana Qila,[269] Mason,[270] Hastināpur,[271] Kauṣāmbi,[272] Bhiṭa,[273] Rājghāt,[274] Vaiṣālī,[275] etc. These finds are an open commentary on the flourishing craftsmanship in ivory and bone during this period.

The ivory industry was highly developed in the subsequent period also, though the use of ivory goods was generally limited to the upper classes. The manufacturing of ornaments from ivory was one of the sixty-four arts to be mastered by a *nāgaraka*.[276] The same text also informs us that in the house of the *nāgaraka* the *vīnā* was suspended to an ivory peg (*nāgadanta*) fixed on the wall,[277] a fact which reflects the popularity of ivory goods in the houses of men of good taste. Kālidāsa has alluded to a seat made of ivory.[278] An ivory seal discovered from Bhiṭa excavations dated to 4th-5th century A.D.[279] sheds further light on the contemporary ivory industry. The beautifully inscribed surface of the seal, the surrounding by a headline and the device of a crawling tortoise show the finesse achieved by the ivory workers in this period.[280]

(g) *Perfume-Making*

Perfume industry was essentially an epitome of the sophisticated culture of the cities. With the growth of urban culture life became luxurious and comfort-loving, leading to the emergence of a class of persons whose sole occupation was to prepare perfumes from flowers, roots and herbs. Naturally, numerous references to this industry are forthcoming in different texts of the period which witnessed the highest flowering of urban culture. These texts present a very interesting and lively picture of the citizens who used perfumes, ointments and other cosmetics with great care.

The *Jātakas* refer to the various processes involved in the making of perfumes. At one place we are told that king Naggaji in the city of Taxila, while sitting on a terrace, saw a woman

who had put on jewelled bracelets on each hand and was grinding perfume. At another place, a perfumer's shop is mentioned.[281] The *Lalitavistara* also refers to incense, essence and excellent unguents.[282] The *Milindapañho* specifically refers to the dealers of perfumes as inhabitants of towns.[283] There are many references to perfumes and perfumers in the literary texts of the period suggesting that the making of perfumes like sandal paste, paints, powders, essences, etc., was a flourishing craft in the early centuries of the Christian era.

In the Gupta period also cosmetics, perfumes and unguents were used both by men and women. Kālidāsa provides an exhaustive list of these articles of luxury in the *Ṛtusaṁhāra* and in the description of the marriage ceremony of Umā and Śiva in the *Kumārasaṁbhava* and of Indumatī and Aja in the *Raghuvaṁśa*. There are numerous references to the use of cosmetics by both sexes in the *Kāmasūtra* of Vātsyāyana. Varāhamihira in his *Bṛhatsaṁhitā* deals exhaustively with the manufacturing of perfumes, etc.[284] A large variety of fragrant powders, scented hair oil, incense, collyrium, ointments, pastes and lac-dye for the feet were produced in order to satisfy the demands of the sophisticated urban aristocracy. The chief cosmetics referred to in the contemporary texts were *kāleyaka kālāguru*[285] (black agaru), *śuklāguru*[286] (white agaru), *harichandana*[287] (a pigment like sandal paste), *manahśila*[288] (realgar) *haritāla*[289] (orpiment), *lodhra*-dust,[290] *dhūpa*,[291] *kumkuma*,[292] *gorochanā*[293] and *ālaktaka*[294] (lac-dye for reddening lips and feet). Surprisingly, all these cosmetics have still retained their names and are used generally during religious worship.

While the cosmetics were mainly consumed by the aristocracy, sandal paste was more commonly used. Sandal wood was ground into a paste or oil was extracted from it and both paste and oil were popularly used in toilet and on all ceremonial occasions. Sandal was chiefly a south Indian product, for Kālidāsa mentions that near the Kāverī and the Tamraparṇī rivers there were numerous sandal wood trees.[295]

The archaeological evidence for the use of perfumes and cosmetics is supplied by the discovery of a large number of antimony rods, perfume vessels, incense-burners, etc. The epigraphic evidence indicates the prosperous condition of the perfumers (*gandhikas*). Some epigraphs from Mathurā record the

gifts made by the *gandhikas*.[296] It is obvious from these records that the perfumers had enough money and high social status so that they could make religious endowments. It is, however, very difficult to say with certainty that the *gandhikas* dealt in pharmaceutical products and indigenous herbs also.[297]

(h) *Liquor and Oil Industry*

In ancient India liquor and oil industry also thrived on a large scale. There emerged a professional class which subsisted by preparing soft and strong drinks and oils of different kinds. From literary references it is evident that liquor and oil had become commodities of common consumption. Different types of drinks and oil shops where they were sold and the persons employed therein are noticed in literature. The Vedic *soma* continued to be used, but some new varieties of wine were also introduced from time to time.

Kauṭilya differentiates between liquors and intoxicants and puts liquor in a class of goods paying a duty 1/10 or 1/15, while intoxicants (*madya*) are included in another class paying a duty of 1/20 or 1/25.[298] The term *surā* also occurs at one place in the *Arthaśāstra* as an independent branch of revenue under the class 'fortified city' (*durga*)[299] indicating thereby the greater consumption of this commodity within the four walls of cities. Keeping in tune with the Mauryan policy of direct control over various economic activities, Kauṭilya provides for a superintendent of liquors (*śweādhyakṣa*) who arranged for the manufacture of spirituous drink and leavening stuff as well as their traffic within the city, the country part and the camp, while their sale should be concentrated in one place or carried on simultaneously at many places.

The *Jātakas* also tell us about the use of liquors, liquor shops and apprentices employed by tavern-keepers. Festive occasions and parties were marked by drinks[300] and this was probably the strongest reason behind banning the *samājas*, etc., in the earlier period by Aśoka. Several other Buddhist texts are replete with references to liquor and oil. The *Acharanga Sūtra* and the *Aṅgavijja* contain interesting lists of fruit juices, drinks and oils.[301] All this implies prosperity of liquor and oil industry. The town life which became luxurious on account of

wealth, public women, dance, music, etc , supported the liquor industry. Drinking became almost a fashion enjoyed by both men and women belonging mainly to the upper strata of society. This is explicit from the drinking scenes noticed in the Gandhāra art.[302]

The oil industry was quite flourishing during the Gupta period. It was generally produced from mustard seeds, both black and white sesamum, linseed and ingudi.[303] The use of ingudi oil for lighting lamps,[304] curing boils[305] and for hair[306] is referred to in Kālidāsa. It was a flourishing industry in this period and the oil-men living in the same locality formed them selves into guilds for their common interest. Thus, during Skandagupta's reign, in the city of Indrapur (Indore), there was a famous guild of oil-men whose head was Jīvanta.[307]

Liquor was produced throughout the country, for Kālidāsa gives numerous references to wine-drinking and wine-selling. Not only men but even women seem to have indulged in drinking. Kālidāsa perhaps reflects the popular feelings of the time when he remarks that intoxication lends a special charm to women.[308] In the *Mālavikāgnimitra*, Irāvatī, the wife of Agnimitra, is seen in a state of intoxication.[309] In the *Kumārasaṁbhava* Śiva himself drinks and makes his wife drink it.[310] The popularity of wine among the womenfolk is further attested to by the Mandasore stone inscription of Kumāragupta I and Bandhuvarman dated A.D. 475-76, which describes the sun as "a dark-red colour, like the cheeks of intoxicated women."[311] In the light of these references the anti-alcoholic stance taken by some Buddhist texts seems amusing. The *Mahāvastu* explicitly states that abstention from drinking intoxicating liquors and spirits is *dharma*.[312] Similarly, Āryasūra in his *Jātakamālā* condemns drinking to be an exceedingly bad action attended with many evils.[313] More intriguing is the report of Fahien who tells us that throughout the country the people neither killed any living creature nor drank any intoxicant [314] Fahien, in fact, was writing from a Buddhistic point of view as he could not convey to his own people the fact that animal-killing and wine-drinking were quite common in the land of the Buddha. Thus Ghoshal's reliance on Fahien and his hypothesis that the revenue derived from the sale of liquors was conspicuous by its absence in the Gupta period[315] is in contravention of the established facts.

(i) *Leather Industry*

The worker in leather was an important craftsman right from the Vedic times. He made various leather articles for domestic and day-to-day use. On the occasion of the *Rājasūya* sacrifice, it is enjoined that the sacrificer should wear shoes made of boar's skin.[316] Besides shoes, the leather-worker also manufactured leather garments. Prescribing the garments for students of different castes, Pāraskara states that the upper garment of a brāhmaṇa should be made of an antelope's skin, that of a kṣatriya from a spotted deer and that of a vaiśya from a goat or cow.[317] These references certainly indicate that the leather-worker had attained great proficiency and skill in tanning. Pāṇini also refers to leather articles manufactured by leather-workers. The term *sarvacharmaṇaḥ kṛtaḥ* used in a *sūtra* probably denotes shoes made from all kinds of leather.[318] The leather-workers made *vaddhr*[319] (strap), *vardhra*[320] (leather throng) and *varatra*[321] (strong rope).

The *Jātakas* refer to leather jerkins, big leather sacks, ropes, straps and parachutes made of leather. A cobbler is referred to as making shoes.[322] There is a reference to big leather bags which were meant for storing gold and silver coins.[323] It appears from the *Jātakas* that leather garments were used as a protection against cold and leather sacks might have been used for storing and transporting merchandise, as they were light and more durable than other types of containers. The use of parachute is, however, not very clear. Leather was used in the making of musical instruments also.

The use of leather for different purposes was known during the Gupta period also, for in the *Amarakośa* the shoe-maker is mentioned together with some of his tools and leather products, namely, knife, shoes, leather fans and leather bottle for oil.[324] The only mass produced article seems to be the shoe. In the Ajantā paintings some persons are depicted as wearing shoes and boots.[325] The skins of tigers, deer and other animals were generally used by *brahmachārins* and hermits. Kālidāsa has referred to Raghu wearing the skin of a deer.[326] Leather was used for bedding purposes also.[327] Some inscriptional evidences indicate that the leather industry was the monopoly of the state in this period. Even after donating the lands, the state

resumed the right to the hides. The Chammak and Siwani copper-plate inscriptions of Pravarasena II[328] and the Poona and Riddhapur copper-plates of Prabhāvatīguptā[329] refer to the state's right to reserve hides. It may be tentatively suggested that the state used to sell hides not only to merchants, but also to individual leather-workers.

(j) *Clay-Working*

The potter's craft was one of the most important and popular crafts in ancient India as is indicated by a host of literary sources and archaeological finds. The objects made of clay were pottery of diverse types and shapes, terracotta figurines, beads, rings for wells, toy-carts, decorative pieces and other household objects. The wide range of fabric, texture and shapes of pottery indicate the existence of skilled potters who specialised in the manufacture of different varieties.

The literary sources and some inscriptions suggest the flourishing condition of potter's craft. By the 6th century B.C., certain villages exclusively settled by the potters came into existence.[330] Pāṇini refers to *kulaka* and *kaulalika* which means potter and earthenware respectively.[331] The general term for a potter in the Jain literature is *bhāndara*. Patañjali mentions that the persons went to potters for giving orders for earthenwares of their own liking.[332] It appears from the *Jātakas* that there were certain potters who were exclusively royal potters and they employed apprentices to assist them.[333] The *Aṅgavijja* also refers to the *kumbhakāras*.[334] The potters were organised into guilds. Epigraphy, too, makes numerous references to pottery and potters.[335] But the real picture emerges from the study of different pottery finds.

Archaeologically speaking, the beginning of early historic urbanisation in northern India is associated with a particular type of pottery called the Northern Black Polished Ware (NBP) This ware originated in Bihar.[336] This ware is spread over various parts of the country from Taxila in the north-west to Bangarh and Tamluk in the east and Amravati in the south. The ware, however, mainly comes from different sites of the Gangetic valley with its focus in ancient Magadha, but it has also been discovered in large numbers at Ujjain in Madhya

Pradesh. It has been suggested on this basis that Ujjain was a separate centre of production of this ware. The above hypothesis is sought to be corroborated by the find of a large number of fragments of rather poor specimens including those without slip in the interior. These sherds have been taken to represent a stage in the history of the NBP industry when the potters of Ujjain were trying to produce them locally.[337] Maheshwar and Kauśāmbī may have been similar centres of NBP production.[338] This pottery, which has been discovered from various north Indian sites, is unique in character and has been termed the 'De-Luxe' Ware. Its high technique and the cost involved in its production make it certain that the potter's industry was not only developed from the technical point of view, but the potters also enjoyed a high status in society, at least, economically.

The pottery of the Śaka-Kuṣāṇa period has been discovered from a number of town sites in Pakistan (Saikhan Dheri, Taxila) and India (Punjab, Rajasthan, Bihar and U.P.). The discovery of pottery from these urban sites implies the local manufacture in towns itself or in their vicinity, because unlike the NBP, the Red Ware, the typical pottery of this period, was not a de-luxe ware which could have been an item of trade. Moreover, potter's dabbers and stamps discovered from some of these sites[339] also suggest the local manufacture of pottery in towns.

The pottery of this period falls under two categories: one found in north-west Indian sites like Saikhan Dheri and the other in the Gangetic valley. The first category consists of sophisticated pottery and is represented in red and grey colours. The types include dishes, strap-handled vases, troughs, bowls, lids, basins and graceful pedestalled chalices. Some of the shapes like the ubiquitous lid and bowl and common vase are similar to those discovered from the Gangetic sites, but a majority of them exhibit foreign influence and seem to have evolved from the Scytho-Parthian ceramic traditions.[340]

Although the pottery of the Gangetic basin is characterised by certain individualistic features and innovations, it is not impressive. It is entirely made of monochrome red ware turned on wheel. The fabric ranges from coarse to fine and the ware is unpainted. It is fired at a medium temperature and

often shows unoxidised smoky core. With the common use of metal in this part of the country, the ceramic industry seems to have lost the artistic merit and was being gradually relegated to the background. The general repertory of shapes is marked by monotonous conservatism with few types adopted for specific use. These include the widely distributed bowls with tapering sides, lids with central knobs, common vases, basins, sprinklers, bottle-necked jars, etc. These pots were evidently intended to serve the kitchen needs of the general masses. The de-luxe table ware was absent [341]

Some of the Śaka-Kuṣāṇa pottery discovered at Kauśāmbī had scratched designs externally. These designs were obviously made after the pottery had been fired. Similar designs were noticed on the pottery of Ferghana and Khorezm also.[342] All this suggests that the potter's craft was in a flourishing condition in this period.

The excavations at Ahichchhatrā, Kauśāmbī and Hastināpura indicate that the potter's craft was flourishing in the Gupta period also. At Ahichchhatrā wheel-made pots are predominant, but mould-made pots form a fair percentage. Most of the vessels are common red ware while a few are mica-dusted to impart a lustrous and metallic surface. Decoration consists mostly of rectilinear or curvilinear geometrical patterns.[343] On the whole it seems that these potteries were basically utilitarian in nature with hardly any emphasis on the finer elements of craftsmanship. This was a natural development, for the towns which were the centres of sophistication were languishing in this period.

Another important craftsman in clay was the clay-modeller. Terracotta objects have been discovered from many urban sites in India. In fact, the history of terracotta in India suggests that its production was associated with urban origins and growth.[344] While in the pre-Mauryan period terracottas appearing in small numbers from some mid and upper Ganga valley sites[345] are either toys or ritualistic in nature, the Mauryan terracottas include art objects. The "dancing girls" of Pāṭaliputra (Bulandibagh, Patna)[346] and Sonpur[347] seem to suggest Hellenistic influence in their facial features, drapery and modelling and reflect sophistication in their slender neck and smooth and sensitive modelling.[348] About a dozen of such

figures including the heads of a smiling boy and girl (from Bulandibagh) have been found. But what is noteworthy is that these artistic terracottas were confined to Magadha which dominated the economic and political scene, while the rest of the country produced terracottas for cults and rituals. Urban economy seems to be a great secularising force in the field of art.

With the further flowering of urban culture in the post-Mauryan period, the mass demand for terracottas came to be met by the potter by the increasing use of moulds. Terracotta-making rose to the level of an industry and terracottas became *paṇya* or commodities for the market. Moreover, with the growth of urban economy, wealth came to be concentrated in towns. The wealthy class not only increased its purchasing capacity, but also started patronising arts and crafts. This enabled the modeller not only to depict in terracotta the life of a city-dweller but to produce it on a mass scale. They also made terracottas of religious connotation. Thus both secular and religious motives influenced the clay-modellers of this period.

It is, however, strange that despite great demand for terracottas, the art of clay-modelling reflects poor craftsmanship in this period. This period has yielded, with rare exceptions, largely coarse hand-made figurines, a situation not quite in tune with the sophistication that goes along with the urbanites. A plausible reason for this development might have been the growing interest of the elite in carved stone objects and costly materials like ivory. The use of metals on a large scale too might have been responsible for this situation. The suggestion that as the potter community was busy in making tiles, pots, ring-wells and other religious objects, they might not have spared adequate time for clay-modelling,[349] hardly seems convincing.

The Gupta period affords a study in contrast of two distinct categories of terracottas and their respective social milieu. The period witnessed a clear-cut division at the top of the social ladder : The urban merchants and the newly emerging landlords. One category of terracottas, which are mostly secular in character, represents finely moulded miniature plaques and figures with superfine texture and they probably catered to the tastes of urban dwellers. Distinct hair-styles of both men and women are the noticeable features.[350] On the other hand, the

second category of terracottas are large-sized figures and plaques associated with brāhmaṇical temples. The epic themes suddenly come into prominence at Ahichchhatrā, Śrāvastī, Chausa, Barehat, etc.[351] In comparison with the sophisticated terracottas of the first category, the temple terracottas are more homely in character, more intimately connected with the daily life of the people and more playful in attitude. The most remarkable aspect of the clay industry is the gradual decline in production after this period indicating thereby that the main period of the production of miniature terracottas was over with the decline of urban culture.[352]

(k) *Other Miscellaneous Industries*

The ancient Indian literature mentions several other minor craftsmen. Some of these were garland-makers, and makers of bow, comb, basket and musical instruments. Almost all these crafts were the product of the sophisticated urban culture and excluding a few, these craftsmen hardly served any social purpose. They were essentially catering to the needs of the urban elite who were prosperous enough to squander money on items of luxury.

That the industrial system in ancient India signifies an advanced stage in the econmic life implying the development of a business instinct which recognises the benefits of a collective organisation, is attested to by the association of an astonishingly developed form of guild system with industrial labour. The most popular term used for this organisation in our literary sources is *śreṇī*.[353] Though at times it denotes a guild in general, it was mostly used in the sense of a craft guild or a guild of persons with a common calling. It was, however, different from a merchants' guild for which the term *naigama* was used.

These corporate organisations were formed to fight common dangers and promote the common interest in a better manner. Bṛhaspati observes that corporate organisations, including guilds, were formed to provide against dangers and for the purpose of discharging duties; the dangers, for example, from thieves, robbers and irregular troops are common to all and it is the united body, not a single individual, that is able

to repel the danger.[354] Moreover, a combined voice can get the grievances easily redressed. There are records of certain instances where guilds could make their opinions effective.[355]

In the age of the Buddha, characterised by the growth of towns and industries, we find that the guild had become a common phenomenon of economic life. Dr. Fick draws attention to the three factors of heredity of profession, localisation of the industries and the institution of aldermen as pointing to the high development of guilds in this period.[356] The *Jātakas*, though they give eighteen as the stock number of crafts and occupations organised into guilds, mention only four of them specifically, viz., carpenters, smiths, leather-workers and painters.[357] Besides these four guilds, we find separate references to the guilds of some more occupations; e.g., workers in stone, ivory-workers, jewellers,[358] garland-makers and flower-sellers.[359] The guilds of bamboo-workers, braziers and corn-dealers are mentioned in the inscriptions from Junnar.[360] References to craft guilds are also forthcoming from other ancient Indian inscriptions. The *Mahāvastu* supplies us with a very exhaustive list of crafts and industries that were organised as guilds.[361] It speaks of the existence of two weavers' guilds at Govardhana. Obviously the number of weavers who thought it prudent to form themselves into corporate bodies seems to have been too large for a single guild. These guilds seem to have attracted a large following as is attested to by the Nasik Inscription dated A.D. 120[362]

The evidence for the period, however, fails to give a clear picture of the constitution and internal working of the guilds. In general, the *Smṛtis* betray an increasing emphasis on partnership in secular affairs and shares and liabilities of the guild members. Almost all the works on the subject recognise that the responsibility in the profit, expenses and loss of the association should be proportional to the shares.[363] But as the quality and quantity of work performed by individual craftsmen differed, a rule was incorporated in order to give a better workman his due share. Kātyāyana says that in the case of a partnership of artisans, where no agreement is made as to shares in property, the partners get in the profits and liabilities shares proportional to the importance of their work.[364] Among the artisans who together carry out some work, those who are

directors of new methods get four shares, those who are adepts in the craft, three shares, those who have studied the craft, two shares and the apprentices, only one share.[365] Bṛhaspati also recognises this principle and provides that the headman among a number of workmen jointly building a house or temple, or digging a pool, or making articles of leather, is entitled to a double share in the remuneration.[366] Those who subsequently joined a group already formed became equally entitled to the property and liable for the debts previously acquired or incurred.[367] The property of the corporate body belonged to all alike; no one could claim it individually. Other elaborate arrangements covering almost all aspects of the disposal and acquirement of the guild's property have been made in the ancient law-books.

The guilds, which enjoyed an autonomous status in the urban economy, had their own constitution and evolved a set of rules to guide their work. Nārada says that the guilds had their own laws, their religious duties, their rules regarding attendance and particular modes of livelihood prescribed for them.[368] An indication of the laws governing the working of the guild is found in a rule of Kātyāyana which imposes the penalty of first amercement on that member of a group who opposes what is reasonable, who gives no scope to a speaker in a meeting of the group or who speaks loudly.[369] The rule at once shows that the proceedings of the general assembly were based on democratic principles but, at the same time, it was provided that the principle of equal opportunity for all to represent their views should not be exploited to hinder the work of the assembly. It was a democratic set-up with a dose of restrictions and responsibility. The actual work of the guilds was, however, in the hands of a committee of two, three or five executive officers.[370] They were in charge of the corporate property, could contract a loan for the guild and represented their guild before the king.

The guilds seem to be quite powerful and exercised considerable authority over the members. Besides possessing judicial and military powers, they also acted as banks and thereby gave a fillip to the emerging urban-industrial economy. A passage in the *Arthaśāstra* implies that the activities of guilds connected with credit and money-lending had started at an

early period.[371] These guilds accepted fixed deposits and undertook to arrange a specified charity out of the interest on the endowment. A number of records from Nasik and Junnar testify to the activities of the guilds as banks.[372] The faith of the people in the permanence of the guild-bank is illustrated by the fact that, in order to make a permanent charitable endowment, even the son-in-law of a ruler of an extensive empire deposited his money with certain guilds[373] instead of entrusting the government itself with the money. By acting as bankers the guilds were not only fulfilling a specific social purpose, but they were also extending credit facilities to the economy.

This discussion about guilds raises a pertinent problem: what was the attitude of the state towards these guilds which virtually controlled the urban industry ? Our sources indicate that the state in ancient India maintained a benevolent attitude towards the guilds. They were allowed to have a free hand in their own matters; the state intervened only in case of a drift towards events likely to affect the guilds adversely.[374] A rule in an inscription of the 6th century provides that members of different guilds should not be allowed to flock to the same market.[375] The rule probably required different guilds to restrict their activities to different fixed markets or else to different quarters of the same market. Thus, they could not encroach upon the jurisdiction of other guilds and disturb the prices by affecting the competition and supply of commodities. One wonders why deliberate attempts were made to keep the urban market competition free.

This raises the question of the growth of industrial production in our period. The references to the high industrial advancements coupled with the immense demand for Indian wares in foreign markets would seem to indicate that large-scale production, as done by factories, was not inherently improbable. But the evidence at our disposal indicates that the real industrial advancement lay in a gradual division of labour within a particular industry and the resulting excellence acquired by an individual craftsman. The *Milindapañho* separately refers to workers in gold, silver, lead, tin, copper, brass and iron. The extent to which specialisation had gone ahead is indicated by a *Jātaka* reference to a man who made ornaments for the head.[376]

The skill thus achieved is attested to by actual specimens of some of the industries that have come down to us as also by literary references.

The real advancement in the sphere of industries resulted only 'in the extension of industry' in the number of workshops built and in the number and extension of the markets opened to it.[377] The beginning of a factory system presumes certain basic developments. To begin with, the power machine should be in use. The aptitude of Indians for mechanical devices is testified to by several pieces of evidence.[378] Mechanical contrivances were made use of for irrigational works.[379] An inscription from Nasik refers to *odayantra* or a hydraulic engine.[380] Numerous similar instances are forthcoming from this period but there is no evidence, whatsoever, to suggest that power generated artificially was utilised for productive purposes. In fact, the nature of industries and the lack of power machines discount the possibility of any large-scale production.

Another necessary ingredient of a factory system is the employment of a large number of labourers for production by a single master. The Jaina works mention Saddālputta, a potter, who had 500 shops where he employed a number of servants.[381] The *Arthaśāstra* also indicates that the state employed a large number of artisans and craftsmen for producing different articles. The *Smṛti* rules about conditions of payment of wages, etc., in cases where artisans are said to have been supplied with implements and tools, probably envisage some such possibility in which a man of resources employed a number of craftsmen in manufacturing certain articles.[382] Thus, this ingredient of a factory system seems to be known at that time. It is, however, to be noticed that business magnates or the class with capital at its disposal never thought in terms of reinvesting money for industrial production. It was certain that some prosperous craftsmen made things on a large scale. In cases where state appears as a manufacturer or producer, production seems to have been motivated more by certain specific considerations and requirements than by any actual desire to launch a financial project. It is possible that the business class did not think in terms of participating in such capitalistic enterprises because of the not so high social status accorded to the occupation of artisans and craftsmen.

This raises the problem of the role the merchants played in the urban economy.[383] The merchants, no doubt, were an important determinant of an urban economy and the whole subsistence pattern of the cities was based on their activities. On the Indian subcontinent there was an enormous mass of villages but only a small number of towns. The town had to be fed by some surrounding villages and there were some few towns with 100,000 inhabitants, although the estimates of the archaeologists differ on this point.[384] It was the merchants who brought foodstuff from the villages into the towns and thereby supported the urban population.

Though the merchants were basically an intermediary group thriving on the labour of the producers, on the one hand, and the profits gained from the consumers, on the other, they at times also aided the economic system itself. The mercantile system was mainly responsible for the growth of the institution of banking in ancient India. There was a recognised scale of business interest rates in those times, the rates increasing with the distance the merchandise had to travel.[385] Long distance transportation was apparently very risky and required high interest rates, which bear testimony to the large speculative profits to be made in such ventures. Manu, who is not invoking here normative precepts from an ancient religious tradition but merely registering current practices in the work-a-day world, advises people to pick their banker with great care and to make deposits only with bankers of good repute, good family and good conduct, who possess truthfulness, a knowledge of the law and good wealth.[386]

Thus the main role that the merchants played in the urban economy was in its distributive aspects. Because of growing trade they not only established a network of the system of distributing the goods manufactured in different localities, they also helped this distributive system by strengthening the institution of banking.

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18. The text gives the following list of occupations: cooks, curry-makers, barbers, bathing attendants, smiths, florists, workers in gold, silver, copper, lead, tin, brass and iron, jewellers, messengers, potters, salt-gatherers, tanners, carriage-builders, carvers in ivory, rope-makers, comb-makers, cotton-thread spinners, basket-makers, bow manufacturers, bow string makers, arrow-fletchers, painters, dye manufacturers, dyers, weavers, tailors, assayers of gold, cloth merchants, dealers in perfumes, grass-cutters, hewers of wood, hired servants, people who live by gathering flowers, fruits and roots in the forests, hawkers of boiled rice, sellers of cakes, fishmongers, butchers, dealers in strong drinks, play-actors, dancers, acrobats, conjurors, professional bards, wrestlers (boxers), corpse-burners, casters out of rotten flowers, soldiers, standard-bearers, officers and camp followers, ivory makers, savages, wildmen of the woods, prostitutes, swingers and jumpers and the slave-girls of bullies. See T.W. Rhys Davids (tr.), *The Questions of King Milinda*, pt. II, pp. 209-11, *SBE.*, Vol. XXXVI (1890).
19. R.L. Mitra (ed. & tr.), *Lalitavistara*, Calcutta (1877), *passim*.
20. III. 113, 442.
21. The guildmen mentioned in the *Mahāvastu* are the musicians, goldsmiths, bankers, cloak-sellers, workers in shell and ivory, jewellers, workers in stone, perfumers, sheath or box makers, oil dealers, hawkers of jars of ghee, sugar factors (*gaulika*), vendors of water (*varika*), factors of cotton, curd, cake, dried treacle, sweetmeats, *kandu* (some kind of eatable), wheat flour and barley meal, hawkers of fruits, roots, perfumed oil from ground powder, *agrivaniyas*(?), *aviddhakas* (?), makers of confectionary from sugar and dried treacle, vendors of dried ginger, distillers and factors of candied sugar.

The craftsmen present at Kapilavastu were brass found-

ers, coppersmiths, goldsmiths, makers of wooden bowls, *pradhvopakas* (?), *rosinas* (?), tinsmiths, makers of lead-sheets, workers in grass, garland-makers, vegetable growers, potters, tanners, weavers of wool, weavers of robes for males, weavers of robes for idols, laundrymen, dyers. cleaners, spinners, painters, carvers, carpenters, basket-makers, modellers in clay, plasterers, decorators, builders, barn-makers, miners, hawkers of fragrant earth, wood, grass, shrubs and twigs, sailors, boatmen, washers of gold and tricksters. See *J.N. Banerjea, Volume*, Calcutta (1960), pp. 1-70.

22. V.S. Agrawala, 'Introduction', in Munishri Punyavijayji (ed.), *Aṅgavijja*, Prakrit Text Society, Varanasi (1957), p. 94.
23. *Aṅgavijja*, XXVIII, 20, p. 159.
24. Some of them were traders, naval architects, boatmen, goldsmiths, dye-makers and dyers, ironsmiths, potters, silk weavers, etc. See Motichandra, 'Introduction to *Aṅgavijja*', *ibid.*, pp. 35-55.
25. Some of these arts are the knowledge of music, dance, garland-making, painting, colouring, ivory-work, perfume-making, making scented and sweet drinks, mechanical oils, ornament-making, smithy, etc. See *Kāmasūtra*, I. 3 15.
26. M.R. Kale (tr.), *The Mṛchchhakaṭika of Śūdraka* (1972), *passim*.
27. Motichandra (ed. & tr.) *Chaturbhāṇi*, Bombay (1959), pp. 69-70, 124-25.
28. *Ibid.*, p. 166.
29. G. Buhler (tr.), *The Laws of Manu*, *SBE*, XVI. X 116.
30. V. 111-14.
31. I. 190.
32. III. 49-51.
33 XXIII. 25, 26.
34. I. 29, 30.
35. IX. 225.
36. *Bṛhaspati*, XIV, 27-28: XVI. 6; *Yāj.*, II. 187; *Nārada*, V. 19.
37. D.C. Sircar (ed.), *Select Inscriptions Bearing on Indian History and Civilisation*, I, Calcutta (1942), nos. 27, 43.
38. *EI*, I, no. XVIII.
39. *Ibid*,, X, p. 68.
40. *Ibid.*, XIX, p. 6.
41. *Ibid.*, I, p. 1.
42. *Ibid.*, XIX, p. 3.
43. *Ibid.*. XIX, pp. 65-66.
44. I, 4. 13.
45. *Kātyāyana Srautasūtra*, XV, 5, 6-9.
46. *Ibid.*, XV, 5, 11-12.
47. *Dīgha Nikāya*, *Brahma-Gāle Sutta*, 15; *Sacrēd Books of the Buddhists*, Vol. II, pp. 11-12.
48. V. 2. 70.
49. V. 4. 160.
50. III. 3. 54.
51. IV. 2. 11.
52. IV. 2. 42.
53. Cited by V.S. Agrawala, *India as Known to Pāṇini*. Lucknow (1953), p, 232.
54. *Arthaśāstra*, II. 23.
55. *Ibid.*, II. 23.
56. *Ibid.*
57. J. Brijbhusan, *Costumes and Textiles*, p. 77: *AŚ*. II. 2.
58. *Ibid.*, II. 2.
59, *Ibid.*
60. *Ibid.*, II. 15-17.
61. J.W. McCrindle, *Ancient India*

as Described by Megasthenes and Arrian, Bombay (1877), Bk. II, XXVII, p. 69.
62. *Sabhā parva*, 51, 8.
63. I. 38, 80; IV. 453; VI. 542-3.
64. *Jātaka*, IV. 542-3. *Milindapañho*, V. 40.
65. *Mahāvastu*, I, pp. 191, 245, 255ff: Max Muller (ed.), *Jaina Sūtras*, *SBE*, XXII, Bk, II, V. 1.4, refers to costly cloth of fur, goat's hair, blue cotton, common cotton, Bengal cotton, *paṭṭā* of Malaya fibres, of bark fibres, muslin and silk.
66. Cited in R.S. Sharma, *Light on Early Indian Society and Economy*. Bombay (1968), p. 75.
67. S. Beal, *Buddhist Records of the Western World*, Delhi (1969), IV, p. 180.
68. Schoff, *Periplus of the Erythraean Sea*, p. 256.
69. Warmington, *The Commerce between the Roman Empire and India*, pp. 157, 160.
70. *Manu*, V. 120.
71. *AŚ*, II. 2.
72. *Early Indian Economics* (1966), p. 72.
73. Wall, *The Commercial Products of India*, p. 993.
74, Warmington, *op. cit.*, p. 177.
75. These stone discs have been collected by the Patna Museum.
76. G.L. Adhya, *op. cit.*, p. 75.
77. *AP*, II. 128.
78. Marshall, *Taxila*, II, p. 502.
79. *AI*, Nos. 10-11, p. 89.
80. *EI*, I, no. 5, p. 384.
81. 10.6, 28.
82 *Ibid.*, 6.116.
83. *Raghu.*, XVI, 43; XVII. 62.
84. Fleet, *CII*. III, p. 89.
85. B.S. Upadhyaya, *India in Kālidāsa*, p. 265.
86. J Legge, *Fa-hsien's Records of Buddhistic Kingdoms* (1886), pp. 23, 79.
87. *Nārada*, I. 63.
88. S.K. Maity, *Economic Life in Northern India in the Gupta Period*, (1970), p. 176ff.
89. Richard Pankhurst, *An Introduction to the Economic History of Ethiopia* (1961), pp. 46-7.
90. *Ṛgveda*, IX, 112, 1.
91. XV. 13-14
92. Ram Gopal, *India of Vedic Kalpasūtras*, p. 117.
93. *Jātaka*, II. 18.
94. Burlingame, *Buddhist Legends*, Vol. 28, pt. 1, p. 270.
95. *Ibib.*, Vol. 29, pt. 2 p. 350.
96. *Ibid.*, Vol. 29, pt. 2, p. 186.
97. *Ibid.*, Vol. 30, pt. 3, pp. 320, 323.
98. *Patañjali*, II, 2.1.
99. *Pāṇini*, V. 4. 95.
100. *Ibid.*, IV. 4.9.
101. V.S. Agrawala, *op. cit.*, p. 155.
102. II. 28.
103. J.W. McCrindle, *op. cit.*, XXXVI, 46, p. 85.
104. *Ibid.*, Bk. II, Frag. XXI, p. 65.
105. *Ibid.*, p. 67.
106. II, 36; IV, 3.
107. *ASI-AR*, 1912-13, p. 73ff.
108. Motichandra, *Sārthavāha*, pp. 38, 47.
109. Cf. Mishra, 'Prāchīn Bhārtīya Vyāpār aur Samudra Yātrā', *JBRS*, XLII, pts I-IV, pp. 16-17, 21.
110. Motichandra, *op. cit.*, p. 47.
111. R.K. Mookerji, *Indian Shipping* (1957), pp. 23-24.
112. Cf. *Bombay Gazetteer*, Vol. XIV, p. 165,
113. *EI*, IX, no. 2. p. 239.
114. I, 3.
115. *Ibid.*, I, 4.

116. *Amarakośa*, III, 4.
117. *Mudrā*, II.
118. H.A. Giles, *The Travels of Fa-Hien*, p. 9; Legge, *op. cit.*, p. 25.
119. *Kāmasūtra*, I. 3.
120. *Kum.*, VI. 53.
121. Legge, *op. cit.*, p. 79.
122. *Ibid.*, p. 113.
123. Griffith, *The Paintings in the Buddhist Cave Temples of Ajanta*, p. 17.
124. VI. 13.
125. *Ibid.*, II, 10, 1-8.
126. Ram Gopal, *op. cit.*, p. 136.
127 Cf. *IAR*, 1958-59, pp. 54-55; *IAR*, *1962-63*, pp. 31, 34; *IAR*, *1971-72*, p. 42.
128. *Pānini*, VII. 3,47: *Uvāsagadasāo* (ed. A.F. Rudolf Hoernle, Calcutta, 1890), p. 108.
129. T.W. Rhys Davids, *Sacred Books of the Buddhists*, Vol. II, p. 360. *Dīgha Nikāya*, *Payasirajannsuttam*, XIX.
130. Burlingame, *op. cit.*, Vol. 29, pt. II, p. 186
131. *Aṅguttara Nikāya*, IV, p. 120.
132. *Dīgha Nikāya*. II, pp. 135-36.
133. *Majjhima Nikāya*, I. p. 25.
134. *Ibid.*
135. *Arthaśāstra*, II. 12.
136. Murray, *JRASB*, 3rd Series, V1, p. 101.
137. *Ibid.*, p. 79.
138. *Arthaśāstra*, II. 13
139. *Ibid.*, II. 11.
140. V.A. Smith, *Aśoka*, p. 137.
141. *The Questions of King Milinda*, p. 331.
142. *Ibid.*, p. 415.
143. 1V, 24. 18.
144. *EI*, I. 4, p. 383, *ibid.*, XXI, p. 391.
145. W.H. Schoff (tr.), *op. cit.*, 1974, p. 6.
146. *AP*, II, pp. 119, 122.
147. Marshall, *Taxila*, II, chs. XXXIII-XXXIV.
148. *IAR*, *1970-71*, p. 62.
149. *Ibid*, p. 19.
150. *Ibid.*, p. 31.
151. *AI*, nos. 10-11, p. 97.
152. *IAR*, *1965-66*, p. 52.
153. G.R. Sharma, *Excavations at Kauśāmbī 1949-50* (1969), pp. 103, 145.
154. B.P. Sinha & S.R. Roy, *Vaiśālī Excavations 1958-62* (1969), pp. 119-200.
155. A.S. Altekar & V.K. Mishra, *Report on Kumrahar Excavation 1951-55* (1959), pp. 140-42.
156. B.P. Sinha & B.S. Verma, *Sonpur Excavations 1956 and 1959-62* (1973), p. 128.
157. *IAR*, *1964-65*, p. 6.
158. *Ibid.*, *1965-66*, p. 11.
159. B S Verma, 'The Archaeological Importance of Chirand', *JBRS*, XXXXV (1959), pts, I-IV, pp. 1-7.
160. *Milinda.*, II. 3.14; *Saddharma Puṇḍarika*, II. 83; *Silappādikaram*, I.V. 24-39; *Manu*, V. 114.
161. XV. 68-69.
162. *EI*, X, no. XII, p. 118; II, no. XXIII, p. 205.
163. *Ibid.*, I, no. 4. p. 383.
164. Marshall, *op. cit.*, Ch. XXVIII; *AP.*, 121-32; *IAR*, *1960-61*, pp. 5, 37, *1964-65*, p. 6; *1967-68*, p. 47; *1969-70*, pp. 40, 42; *1970-71* pp. 31, 62: *1971-72*, p. 42; *AI*, nos. 10-11, pp. 95-97; G.R. Sharma, *op. cit.*, pp. 93; 96, 106; B.P. Sinha & S.R. Roy. *op. cit.*, pp. 195-97; A.S, Altekar & V.K. Mishra, *op. cit.*, pp. 132, 135.
165. *AI*, no. 4, pp. 78-79, *IAR*, *1969-70*, p 42.

166. *AP*, II, pp. 30, 37, 192, 134.
167. Marshall, *op. cit.*, II, Chs. XXIX-XXXI.
168. B.P. Sinha & S.R. Roy, *op. cit.*, p. 195.
169. *Amar.*, 9. 88-105.
170. *Kāma.*, I. 3.
171. *Amar.*, I. 28; 8.42, 70-72; 9.12, 13, 30.
172. *JRASB*, VI (1940), p. 83.
173. *ASI-AR*, *1911-12*, no, 11. p. 92.
174. *Ibid.*, p. 91.
175. *Ibid.*, p. 92.
176. *Ibid.*
177. *Ibid.*
178. *Ibid.*
179. *Ibid.*, p. 91.
180. I. 3.
181. *ASI-AR*, *1911-12*, p. 92.
182. J.F. Fleet (ed.), *CII*, Vol. III, p. 82.
183. *Ibid.*, p. 166.
184. *JRAS*, 1901, p. 864.
185. *Chullavagga*, V. 17.2.
186. *A Comprehensive History of India*, Calcutta (1957), Vol. II, p. 91.
187. Cited in V.A. Smith, *Early History of India*, p. 144.
188. *ASI-AR*, *1904-5*, p. 36.
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190. Marshall, *Taxila*, II, Ch. XXV.
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192. *AI*, Nos. 10-11, p. 90.
193. G.R. Sharma, *op. cit.*, p. 93.
194. A.S. Altekar & V.K. Mishra, *op. cit*, p. 130.
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199. *IAR*, *1970-71*, p. 62; *1971-72*, p. 42.
200. *Ibid.*, p. 31.
201. *Ibid.*, *1954-55*, p. 16.
202. B.P. Sinha & B.S. Verma, *op. cit.*, p. 101.
203. B.P. Sinha & S.R. Roy, *op. ctt.*, p. 188.
204. *AP*, II, pp. 38-40.
205. *Op. cit.*, Ch. XXXVI.
206. J. Ph. Vogel. *Archaeological Museum at Mathurā*, Delhi (1971), pp. 27-28.
207. *Ibid.*, pp. 47-171.
208. S. Swarup, *The Arts and Crafts of India and Pakistan*, p. 37.
209. *Bṛhatsaṁhitā*, Chs. LXXX-LXXXIII.
210. *Aṁar.*, 9. 92.
211. *AI*, nos. 10-11, pp, 90, 92-94; *AIR*, *1970-71*, p. 62; *1971-72*, p. 42; *1964-65*, p. 43.
212. *ASI-AR*, *1912-13*, p. 41.
213. *Ibid.*, *1924-25*, p. 48.
214. *Ibid.*, *1936-37*, p. 39.
215. *Ibid.*, *1924-25*, p. 49; *1927-28*, p. 139.
216. *Ibid.*, *1914-15*, pp. 19, 22, 24.
217. *Ibid.*, *1919-20*, p. 19; *1922-23*, p. 157.
218. Marshall, *Guide to Taxila*, p. 59.
219. It has been presumed that the work of Suśruṭa which contains much traditional knowledge is naturally to be traced back to earlier times.
220. *Sūtra*, 8.15.
221. *Ancient India*, no. 8, p. 27.
222. *Ibid.*, p. 24.
223. *Ibid.*, no. 1, pp. 37-40; no. 8, pp. 53-61.
224. Marshall, *op. cit.*, p. 59.
225. *Idem*, *Taxila*, II, p. 684.
226. *AI*, no. 8, pp. 19-22.
227. *Ibid.*, nos. 10-11, pp. 13, 90.
228. *Ibid.*, no. 13, p. 112.
229. *IAR*, *1958-59*, p. 48ff.
230. Cf. M.G. Dikshit, *History of*

Indian Glass, Bombay (1967), p. 2.
231. XIII. 2.6.8.
232. V. 8.3.
233. V. 9.1.
234. II. 13
235. II. 17.
236. V. 2.
237. *Rāmā.*, II. 90.27.
238. Cf. *Bṛhatsaṁhitā*, LXXXVI. 23.
239. *AP*, II, pp. 121-22.
240. M.G. Dikshit, *op. cit.*, pp. 39, 153.
241. *Ibid*, p. 31.
242. XXII. 216.
243. IX, 34.
244. XXIV, 178-79, 185, 194.
245. No doubt the *Kathāsaritsāgara* is a later work, but the original *Bṛhatkathā* of Guṇāḍhya, of which it is a recension, is an earlier composition (Keith, *History of Sanskrit Literature*, p. 266ff). The fact that Daṇḍin, Subandhu and Bāṇa refer to Guṇāḍhya and his work with great respect shows that by the fifth century A.D. his name had become a classic in literature. The tradition which associates him with king Sātavāhana has been taken to place him round-about the first century A.D.
246. *Natural History*, XXXVI, 66.
247. *Ibid.*, XXXVII, 20.
248. *Das Glas in Altertume*, p. 106, quoted by B.B. Lal, *AI*, no. 3, p. 18.
249 *AI*. no. 8, p. 20-26; nos. 10-11, p. 13.
250. *Ibid.*, p. 21ff.
251. *Ibid.*, p. 21.
252. *Ibid.*
253. *Ibid.*
254. *AR-ASI*, *1919-20*, p. 19; *1922-23*, p. 157.
255. Marshall, *Guide to Taxila*, p. 59.
256. *Ancient India*, nos. 10-11, p. 13.
257. *Ibid.* In the two bangles from Hastināpur the presence of iron accounts for their brownish or dark colour.
258. *AI*, no. 8, p. 17.
259. Vibha Tripathi, *The Painted Grey Ware: An Iron Age Culture of Northern India*, Delhi (1976), p. 112.
260. *Jātaka*, I, 320.
261. *Ibid.*
262. *Ibid*, II, 197.
263. *Rāmā.*, II. 10, 14-15.
264. *Ibid.*, V. 10.2.
265. N.P. Dwivedi, *Indian Ivories*, New Delhi (1976), pp. 87-89; see also *JUPHS*, 1965, pp. 1-6; *Marg*, XXIV, no. 3, pp. 47-54.
266. *IAR*, *1953-54*, p. 7.
267. *Ibid.*, *1965-66*, p. 38; *1970-71*, p. 62.
268. *Ibid.*, *1970-71*, p. 31.
269. *Ibid.*, *1969-70*, p. 5; *1970-71*; p. 19.
270. *Ibid.*, *1964-65*, p. 43; *1965-66*, p. 52; *1970-71*, p. 76.
271. *AI*, Nos. 10-11, pp. 90, 92.
272. G.R. Sharma. *op. cit.*, pp. 93-94.
273. *ASI-AR*, *1911-12*, p. 34.
274. *IAR*, *1960-61*, p. 37.
275. Krishna Deva & V.K. Mishra, *Vaiśāl Excavations* (1950), 1961, p. 59; B.P. Siṇha & S.R. Roy, *op. cit.*, pp. 193-99, 200ff.
276. *Kāmasūtra*, I. 3.
277. *Ibid*, I. 4.
278. *Raghu.*, XVII, 21.
279. *ASI-AR*, *1911-12*, p. 48.
280. *Ibid.*
281. *Jātaka*, III. 408; IV. 454, 481; VI. 538.
282. *Lalitavistara*, pp, 77, 134ff.
283. V. 4.
284. *Bṛhat.*, LXXVII.
285. *Ṛtu.*, II. 21; IV. 5.
286. *Kum.*, VII. 15.

287. *Raghu.*, VI. 60.
288. *Kum.*, VII. 23.
289. *Ibid*, VII. 33.
290. *Ibid*, VII. 9.17.
291. *Ṛtu.*, IV. 5; V. 5. 12.
292. *Ibid.*, IV. 2; V. 9.
293. *Kum*, VII. 15, 17.
294. *Ibid.*, V. 34.
295. *Raghu.*, IV. 45, 48-52.
296. *EI*, I, no 7, p. 385; II, no. 16, *p. 202; IA, XXXIII, no. 21*, p. 107.
297. *IC*, XII, no. 1, p. 84.
298. *Arthaśāstra*, II. 22.
299. II. 6.
300. *Jātaka*, I. 47, 81, 127; II. 289; V. 512; VI. 543.
301, *Acharanga Sūtra*, II. 1.8; *Aṅgavijja*, p. 64.
302. B.N. Puri, *India under the Kuṣāṇas*, Bombay (1965), pp. 95-7.
303. *Amar.*, 9.17, 19, 20, 95, 189.
304. *Raghu.*, XIV, 81.
305. *Śak*, IV.
306. *Ibid.*, II.
307, Fleet, *op. cit.*, p. 70, 1.8.
308. *Kum.*, VI. 42.
309. *Mālav.*, III.
310. *Kum.*, VIII. 77.
311. Fleet, *op. cit.*, no. 18, 11.2-3.
312. *Mahāvastu* (tr. J.J. Jones), Vol. II, p. 96.
313. *Jātakamāla*, XVII, p. 100.
314. Legge, *op. cit.*, p. 43.
315. *Contributions to the History of Hindu Revenue System*, Calcutta (1929), p. 192.
316. *Baudhāyana Śrauta Sūtra*, XII. 12.
317. *Pāraskara Gṛhya Sūtra*, II. 5, 17-19.
318. *Pāṇini*, V. 2.5.
319. *Ibid.*, III. 2. 182.
320. *Ibid.*, IV. 3. 149.
321. *Ibid.*, IV. 3. 149.
322. *Jātaka*, III. 324, 336; V. 514; VI. 538.
323. *Buddhist Legends*, Vol. 28, pt. 1, p. 274.
324. *Amar.*, 10.7, 23, 30-31, 33, 35.
325. K.B. Codrington, *Indian Antiquary*, 1930, pp. 160-61.
326. *Raghu.*, III, 31.
327. *Ibid.*, IV. 65.
328. Fleet, *op. cit.*, p. 238, I. 28 and p. 246, I. 29.
329. *EI, XV, p. 42, 1.17; JASB* (N.S), XX, p. 59, I. 19.
330. *Uvāsagadasāo*, 7.181.
331, 4.3.118.
332. *Mahābhāṣya* (ed. Abhyankar Shastri, Poona), p. 23.
333. *Jātaka*; 1.4; V. 531.
334. *Aṅgavijja*, p. 160.
335. B.P. Sinha (ed.), *Potteries in Ancient India*, Patna, pp. 229-38.
336. *Ibid.*, pp. 148-50.
337. *IAR, 1956-57*, p. 24.
338. B.P. Sinha (ed.), *op. cit.*, p. 151.
339. Marshall, *Taxila*, II, pp. 424, 437; *IAR, 1970-71*, p. 31; *IAR, 1971-72*, p. 42; *IAR. 1967-68*, p. 52 etc.
340. B.G. Gafurov (ed.), *Central Asia in the Kuṣāṇa Period*, Vol. I, Moscow (1974), p. 93.
341. *Ibid*, pp. 92-93.
342. *Ibid.*, Vol. II, pp. 30-33.
343. *AI*, 1946, p. 41.
344. D. Desai, 'Terracottas and Urban Culture of Ancient India (*circa* 600 B.C.-A.D. 600)', *PIHC*, XXXVII Session, pp. 555-562.
345. Cf. *idem*, 'Pre-Mauryan Terracottas of the Ganga Valley, *c.* 600 B.C.-320 B.C.,' *PAIOC*, Dharwar Session (1976).
346. K.P. Jayaswal, 'Terracottas Dug Out at Patna', *JISOA*, III.
347. *IAR, 1961-62*, pp 4-5.
348. D. Desai, *PIHC*, XXXVII Session, p. 559.

349. *Ibid.*, p. 555ff.
350. *AI*, no. 4, Fig. 1, pp. 111, 137-38, pls. XLIX, L,LI.
351. *Ibid.*, pl. LXVI.
352. D. Desai, *op. cit.*, pp, 560-61.
353. L. Gopal, 'Organisation of Industries in Ancient India', *JIH*, Vol. XLII, pt. III, pp. 891-92.
354. XVII. 5-6.
355. The *Nāyādhammakahā* (cited by J.C. Jain, *Life in Ancient India as Depicted in Jain Canons*, p. 109) relates how on an approach made by the guild of painters a certain prince commuted the sentence of execution passed against a painter into one of banishment. The *Āvaśyakachūrṇī* (*ibid.*), refers to a washermen's guild visiting the king to demand justice.
356. *Social Organisation of North-east India in Buddha's Time* (tr. S. K. Maitra), pp. 177-83.
357. VI. 22. 427.
358. Rhys Davids, *Buddhist India*, p. 90ff.
359. R.C. Majumdar, *Corporate Life in Ancient India*, pp. 18-19.
360. Buhler-Burgess, *ASWI*, Vol. IV, nos. 10, 24, 27.
361. III, pp. 113, 442ff.
362. Luders, List No. 1133.
363. *Arthaśāstra*, III. 14; *Nārada*, III. 2-4; *Yājña*. II. 259.
364. 633-636.
365. *Ibid.*, 632.
366. XIV. 28-29.
367. *Kātyāyana*, 675.
368. X. 2-3.
369. 671.
370. *Brhaspati*, XVII. 8-10, 18-20; *Kātyāyana*, 674-677.
371. V. 2. Kauṭilya advocates that for replenishing his empty treasury the king's agents disguised as merchants may borrow from corporations bar gold and coin gold for various kinds of merchandise to be procured from abroad and pretend to be robbed the same night.
372. Luders, List Nos. 1133, 1137, 1162, 1165.
373. *Ibid.*, 1133.
274. Cf. L. Gopal, *op. cit.*, pp. 800-01.
375. *JRASB*, XVI, p. 115.
376. II. 191.
377. Cf. Henri-Berr's Foreword (p. xix) to Toutain, *Economic Life of the Ancient World*.
378. *Jātaka*, VI. 432; *Mbh*. I. 14.3.5.
379. *Chullavagga*, V. 16. 2; *Amarakośa*, III. 10. 27.
380. Luders, List No. 1137.
381. *Uvāsagadasāo*, Vol. I, p. 105; J.C. Jain, *op. cit.*, p. 100ff.
382. Cf. *Nārada*, VI. 14.
383. Here we have deliberately avoided a discussion on trade and trade-routes as it has been discussed in a number of monographs. We are mainly concentrating on the role that the merchants played in the urban economy of the period.
384. Walter Ruben, 'The Development of Town in Ancient India', *History and Society* (ed. Debiprasad Chattopadhyaya), Calcutta (1976), p. 232.
385. D.D. Kosambi, *An Introduction to the Study of Indian History*, p. 140.
386. L.C. Jain, *Indigenous Banking in India*, London (1929), p. 9.

4

Urban Society

URBANISATION as a historical process represents a typical level of social development wherein the social system is based on residence rather than kinship. In certain exceptional cases, however, it may also refer to individuals, social groups and categories whose 'urbanisation' need not involve their residence in town;[1] or to certain settlements that experience the processes or exhibit the characteristics of urbanisation, however they are defined. But as the 'urbanisation' of individuals, social groups, or non-urban populations presupposes an urban process or centre from which such influences radiate, we shal-confine our study to the social system of the urban centres. This raises the problem of the multiple criteria by which urbanisation as a process or a representative social system may be defined. From an analysis of the existing data it would seem that the basic difference between the urban and rural social systems is in terms of degrees of differentiation, mobility, secu-

larisation and contractual freedom, and all these sub-societal institutional formations are essentially the epitomes of an urban social setting.[2]

The urban society is not based on kinship but on residence and the residents belong to various diverse groups. The close living together and working of individuals who have no emotional ties fosters a spirit of competition and mutual exploitation. Formal controls, like the state's role in formulating and regulating certain laws related to matters concerning the guilds in ancient India,[3] are instituted to counteract irresponsibility and potential disorder. Naturally, the social interaction among such a variety of personality types in the urban milieu tends to break down the rigidity of caste lines, as in the case of ancient Indian urban centres, and induces a more ramified and differentiated framework of social stratification in terms of classes than is found in more integrated societies.

This raises the question of urban mobility. The very existence of an urban setting means the undermining of the orthodox ideas relating to social hierarchy and social isolation, a development which is further aided by rural-urban migrations. This is not to suggest that there was any large-scale drift to the city. In fact, in the ancient context[4] the society was predominantly rural, and the rural element was quite strong even within the city walls. Mumford has clearly illustrated this situation obtaining in the Greek cities of the 5th-4th centuries B.C.[5] This might suggest that even though there was an absence of any large-scale migration from the villages into the towns, yet the drift was not at all negligible. The new-comers to the city certainly kept the urban society an open society as distinct from the closed and immobile rural societies of the period.

The most important aspect of social mobility is, however, the movement within the urban social hierarchy. This movement takes place on two levels—individuals moving up or down the social ladder or groups changing their status in the social hierarchy. The very origins of a city gives a rude shock to the existing caste/class stratification and leads to a new orientation of various social groups within the urban social scale. Profession and expertise assumes a socially meaningful dimension and this is mainly instrumental for individual/group mobility in such societies. In the ancient Indian context, where

caste system dominated, we have evidences to suggest co-relationship between castes and their economic professional expertise in certain periods of urban development. Moreover, the urban system, which lacks any positive sense of kinship, is generally composed of competing individuals and groups in a state of permanent unstable equilibrium, and this equilibrium can be maintained only by a process of continuous readjustment leaving ample scope for social mobility.

A more forceful manifestation of urban society is the tendency towards secularisation. In a non-urban society the traditions lend their moral basis, the mystique, which sets forth the *dharma* in such a way that change seems a disharmony and counter to the nature of society—a situation which is in direct contravention to the urban system. In fact, an urban system, based on the concept of change, cannot thrive with a religious hold over it; it is bound to be a secular society.[6] Likewise, here it may be added that the urban society is also marked by contractual freedom. The only form of contract noticeable in the ancient Indian urban context was in the form of artisan and merchant guilds but in such cases too membership was voluntary.

The above discussion makes it clear that urban society is not only a technological advancement upon rural society, but socially too it signifies a more complex, a more rational and a more 'universalistic' setting. In this context it may be noted that while talking of class differentiation in ancient Indian urban centres it would be foolish to completely ignore the traditional caste division; they certainly exercised their influence over the social system. It is, however, equally true that in the urban setting a social division completely on the basis of caste equations is a misnomer; social stratification was gradually emerging in terms of professions with the presence of caste ethos distinctly felt. Thus the different segments of the urban society can be broadly categorised under the following heads :

(a) The ruling elite consisting of the king and his higher administrative and army officials;
(b) priests;
(c) lower administrative and military personnel;
(d) independent professionals like physicians, scribes,

accountants, teachers, etc.;
(e) mercantile community;
(f) artisans and craftsmen;
(g) public entertainers, consisting of singers, dancers, actors, musicians, etc.;
(h) prostitutes; and
(j) the tertiary group.

(a) *The Ruling Elite*

On top of the urban social ladder were the king and his higher administrative and military officials. Contemporary literary and epigraphic records are full of references to such persons. With the emergence of large states and towns by the 6th century B.C. the territorial idea was strengthened and this led to the development of an organised bureaucracy. We come across a class of high functionaries called *mahāmātras* in early Pāli texts. Employed in different capacities as multipurpose officers, *mantrin*, *senānāyaka*, judge, chief accountant (*gaṇaka*) and head of the royal harem, they along with the royal family came to occupy the most privileged position in society. In the same social grouping were certain other officials, like *vyavahārika mahāmātras*, who were solely concerned with the administration of justice.

During the Mauryan period, because of a distinct thrust towards centralisation over all manifestations of human activity, the elite group further swelled in numbers. The *Arthaśāstra* refers to 18 *tīrthas* connected with political administration and 27 *adyakṣas* mainly connected with the economic system of the empire. Added to this were the conventional officers, the members of Mauryan city government and the newly created officials of Aśoka. The post-Mauryan period, however, witnessed a perceptible decline in the number of the ruling elite. Because of certain factors leading to decentralisation and the emergence of autonomous government in at least a dozen cities, the bureaucracy became relatively less in number, a tendency which found its logical culmination under the Guptas. Because of the prevalent practice of land grants and certain other political developments a considerable area of imperial administration came to be managed by feudatories

and beneficiaries with the result that the Gupta rulers did not require as many officials as the Mauryas did. The need for an elaborate administrative establishment especially stationed at towns was further lessened by the participation of artisans, merchants, elders, etc., in urban administration. In fact, due to the beginnings of feudal formation the urban bureaucratic nobility of the towns started losing their erstwhile status, for now, they had to reckon with a very formidable group of the emerging feudal landed aristocracy.

In the urban structure of things, the ruling elite came to appropriate most of the privileges. It was this class which played the role of exploiters in a society completely based on surplus production. It was the rulers who organised the systematic appropriation of this surplus and thrived on the produce of others In turn, they were the greatest consumers of goods and in a way encouraged and patronised the production of luxury articles so prevalent in that sophisticated milieu.

(b) *The Priest*

An important partner of the ruling elite was the priest. In pre-urban societies the priests dominated but the urban milieu provided a rude shock to the priestly pretensions. In ancient India loyalty of the people was not directed towards political order, it was directed towards the social order. The representatives of the social order were the priests and, hence, the ruling elite could not survive without the active cooperation of the priestly class. As a result, along with the ruling elite the priests formed the uppermost stratum of urban society and provided the magico-mythological sanction to the exploitative nature of the society. While one partner relied on coercion and based their strength on *daṇḍa*, the other partner, i.e., the priests, dominated the scene by administering superstitious religious doses to the toiling masses to keep them under check as well as to keep them on the path of *dharma*. Religion in contemporary society came to play the role of an exploiting institution by hoodwinking the unsuspecting and superstition-ridden masses.

In the pre-urban societies the priest enjoyed the most pri-

vileged position mainly because of his magico-mythological pretensions.[7] But with the beginnings of urbanisation in *c.* 6th century B.C., the situation started changing. The very emergence of urban centres marked a break with the past in many respects and religious orthodoxy was one of them. The towns were centres of secular activity and they played a unique role as secularisers of ancient society at least in a limited geographical demographic sense. The process of secularisation of the urban society tended to undermine the influence of the magico-mythical cults and thereby the very source of *purohita's* strength came to be threatened. A clear manifestation of this development was the concerted attack launched by the kṣatriyas against the brāhmaṇas in the days of the Buddha.[8] The most important aspect of this struggle was the fact that the kṣatriyas had no grudge against the poor brāhmaṇas, it was the upper class brāhmaṇas who were the target of attack.[9] This development was symbolic of an urban mind which was no longer ready to accept the fetters of superstition and thereby the undermining of *purohita's* power and status in the society remained only a matter of time.

The impact of this anti-magico-mythical spirit in the urban surrounding was not immediately perceptible. The *purohita* continued to enjoy the pre-urban status in the urban setting of the 6th century B.C.[10] and even Kauṭilya who represents a relatively developed phase of urbanisation accorded to him a very high status.[11] But surprisingly enough the whole range of Aśokan inscriptions have nothing to say about this politico-social functionary of the state, on the other hand, the period witnessed the gradual exaltation of royal authority.[12] The emerging urban spirit and the growing importance of the kṣatriyas made the position of the brāhmaṇas precarious. The new situation was certainly recognised by Kauṭilya and Aśoka, both of whom tried to undermine the priestly influence in politics, religion and society. Moreover, the appointment of *dharma-mahāmātras* by Aśoka and the virtual end of the sacrificial religion because of the gradual impact of Buddhist ideology may also have undermined the priestly status in the urban society.

The anti-priestly attitude continued even during the post-Mauryan phase. The *purohita* figures neither in Sātavāhana

nor in Kuṣāṇa inscriptions; nor does he appear in Gupta inscriptions. It is argued that with the disappearance of Vedic sacrifices the *purohita* lost his importance. But even the revival of sacrifices under the Sātavāhanas did not elevate the socio-political status of the priest. Sharma tries to explain this development by arguing that the Sātavāhanas acted as their own priests[13] and hence the lack of priestly office during their times. But this is a lopsided explanation. The dissociation of priests with urbanism seems to be the most important factor for this development. For Sharma's explanation for the non-existence of the priest cannot be offered in the context of the Kuṣāṇa and Gupta socio-political set-up, rather it once again demonstrates the anti-priestly bias of the urban society especially if we keep in mind all the manifestations of brāhmaṇical propaganda associated with the Guptas. Our point is further strengthened as the re-emergence of the office of the *purohita* in the early medieval period[14] roughly synchronises with the phase of urban decline.

Thus, it would seem that in the urban society of the period the priests occupied a varying status. From the position at the top they gradually came to have a comparatively insignificant status in the urban society marked with exploitation and professionalism. They, however, throughout the course of urban social history along with the ruling elite acted as co-partners of exploitation.

(c) *The Lower Administrative and Military Personnel*

The lower administrative and military personnel constituted a sizable section of the urban population. Persons and groups belonging to this class included watchmen, messengers, spies, archers, armymen and those connected with the king and his court. These people depended on the state for their subsistence and lived in towns where they had better job opportunities. From the *Jātakas* we come to know about royal potters, jewellers, barbers, cooks, gardeners and royal bards.[15] There were also elephant trainers, valuers, gate-keepers, guards, female slaves, etc.[16] Our contemporary literary and epigraphic sources also refer to a host of officials connected with civil, military and criminal aspects of administration. Like

the higher officials, their number also fluctuated from time to time, but in no period of urban history were they negligible in number in urban society.

This raises an important point regarding the existence and subsistence of armymen in urban society. From the Greek sources we come to know that the Nanda army consisted of 20,000 cavalry, 200,000 infantry, 2,000 four-horsed chariots and 3,000-6,000 elephants. The same sources also talk about a more elaborate army machinery under the Mauryas. It is, however, true that these numbers might have been inflated and that the later kings did not need such a vast standing army, but the capital fact remains that the armies, whose number was the largest compared to any urban group, were the devourers of a major share of the surplus appropriated from the basic producers. They, in turn, played a specific and crucial role in urban society which was based on exploitation. They provided the coercive arm to the ruling elite without which exploitation of rural agriculturists as well as urban 'proletariat' was impossible.

The army personnel together with the lesser officials formed the second fiddle of administration and maintained their existence in the urban setting by carrying out the wishes of the ruling elite. From a sociological point of view, they did not have an independent status in the urban setting; their status differed with the shifting needs of the time. That they were completely subordinated to the higher officials both administratively and socially is clear from the wage regulations of Kauṭilya. The highest functionaries such as the *mantrin*, *purohita*, *senāpati* and *yuvarāja* were paid as much as 48,000 *paṇas*. In contrast the lowest officials were recommended only 60 *paṇas*[17] and at times only 10 or 20 *paṇas*.[18] The ratio works out at 1:4800, which indicates an enormous gap between the highest and the lowest class of officials. In spite of this acute socio-economic differentiation, the whole bureaucracy, both high and low, were distinct partners in exploitation. In fact, the lower officials were the long arm of the state through which it got carried and implemented its orders. Thus, the largest number of urban population consisted of these people who offered their services to the state.

(d) *The Independent Professionals*

For want of a better substitute we may describe the next group of urban residents as independent professionals. Within this group were included the occupations of the doctor of medicine and surgery, practitioner of law and the professions involving writing, accounting and money-changing. These professionals generally carried on their business individually and independently, though sometimes they were also employed by the state as well as attached to rich persons.

Of all the occupations, the doctor's profession appears to be socially valued the most. This is quite clear from the frequent appreciative mention of doctor Jīvaka in the Buddhist texts in spite of the fact that he was the son of courtesan Silāvatī and his paternity was dubious.[19] Monk Upāli, formerly a barber, who later became an expert in *Vināya*, and doctor Jīvaka are two important persons in the Buddhist society whose status ascribed to them through low birth is not compatible with that achieved by them through their professions. But whereas barber Upāli is abused at times by the ignorant nuns,[20] Jīvaka is never insulted or looked down upon by the members of the urban society so much so that at one place he is specifically stated to be one who is "much liked by the people" (*puggalappasannānaṁ*).[21] Our sources are very explicit about Jīvaka's professional attributes.[22] He is the king's physician[23] and a trusted friend of king Ajātaśatru of Magadha.[24] The only other doctor mentioned by name in the Buddhist texts is Ākāsgotta *Vejja*, who p rforms a surgical operation on a monk. Unlike Jīvaka he seems to be a brāhmaṇa. He is hostile and even insulting to the Buddha and addresses him as *bho*.[25] Thus, one reason for a high status for the doctors in the contemporary urban setting might have been the fact that at least some of them belonged to the brāhmaṇa caste. The *Aṅgavijja* mentions different specialists in medicine, e.g.,*vejja*, *kayategichchhaka* (healers of the body), *sallakata* (surgeon), *salaki* (eye-surgeon), *bhutavijjika* (witch doctor), *komaravichha* (physician for children) and *visithika* (poison doctor).[26] Manu, however, reserves the occupation of the physicians for the *Ambasṭhas*.[27]

This raises a very interesting question about the place of doctors in the ancient urban society. Surprisingly, a prominent

feature of the Indian legal literature is the intense contempt for physicians and surgeons. The usual way of expressing it is to declare that the doctors are intrinsically impure beings, so impure indeed that their very presence pollutes a place, that food offered by them is too filthy to be accepted and that even the food offered to them turns into something vile. The law codes of Āpastamba,[28] Gautam[29] and Vaśiṣṭha[30] are quite explicit on this point. All these three authorities belong to the earliest group of Indian law-givers and P.V. Kane places them between 600 B.C. and 300 B.C.[31] Therefore, judged from what Āpastamba and others have said in this context we can presume that the legal contempt for the doctors—and therefore also for their science—is to be traced to the 6th century B.C., not incidentally the period which marked the beginnings of early historic urbanisation in India. This coincidence probably is the key to the understanding of this mysterious attitude. The growth of a secular medical science in the urban milieu was a direct attack on the scriptures in the sense that it undermined the magico-mythical healing powers of the brāhmaṇas.[32] Naturally, the brāhmaṇas, who were the authors of the legal texts, went all out against the new medical science. Here is an instance of the ritual-ridden orthodox society's contempt for the emerging rationalistic and secular urban society.

An important group of professionals residing in the towns were the lawyers. With the emergence of the Indian legal and judicial system[33] almost contemporaneously with the cities, the society naturally came to need a group of people conversant with the new legal system. From certain references to lawyers in the *Jātakas*[34] and the *Kāmasūtra*[35] it may be inferred that the lawyers were recognised as a separate class of urban professionals. This was a natural corollary of the fact that the new urban framework, which was based on the concepts of private property and family instead of pre-urban kinship organisation and communal ownership of property, needed an elaborate framework to sustain itself. As such, *Smṛti* laws were formulated and the judicial administration became complicated leading to the emergence of a group which explained laws to general masses on payment. Although the judicial administration in ancient India was a royal prerogative, the lawyers probably helped independently the individuals before

different courts in the administration of law and justice.

Money-changing and counting, accounting in general and writing are identified positively as the only high urban *sippas* in the Buddhist texts.[36] In a society where intellectual occupations are necessarily a preserve of a few, it is natural that they are considered very high on the social ladder. It is for this reason that young Upāli's parents when planning their son's career think of writing (*lekhā*), accounting (*gaṇanā*) and money-changing (*rupaṁ*),[37] indicating thereby that they considered these to be the best of professions.

The profession that Upāli was to enter after learning writing was probably that of a scribe, an important urban resident. The development of *Brāhmī* and *Kharoṣṭhi* scripts, and the discovery of a host of Mauryan, Kuṣāṇa, Gupta, etc., inscriptions along with the copper-plate charters issued from the Sātavāhana period onwards, suggest the existence of scribes. There was a class of skilled engravers, whose services were either hired by the state or the individuals who needed them. It is also apparent that there were separate scribes for stone, metal and clay, because writing on different materials required varied skill. The paleographic evidence suggests that Sanchi, Mathurā, Kauśāmbī, Sārnāth, Śrāvastī, etc., flourished as important centres of scribes with their own specific styles. The *Brāhmī* script of northern India came to have two distinct styles, the eastern and the western. Kauśāmbī was the centre of the eastern style of writing while Mathurā of the western. The existence of the scribes is also attested to by certain literary texts. Thus Yājñavalkya asks the king the protect his subjects from the *kāyasthas.*[38] Commenting on Yājñavalkya Mitākṣara interprets the word *kāyastha* as accountant as well as scribe.[39] Probably the scribes used to manipulate royal grants or other endowments in someone's favour or disfavour and this might have prompted Yājñavalkya to advise the king to protect his subjects from the *kāyasthas.*

Another important independent urban professional was the teacher. From the *Jātakas* we come to know that Banaras and Taxila flourished as important educational centres where world-famed teachers imparted education to students. However, it is difficult to say whether the teachers were appointed by the state or other charitable institutions or they themselves managed

educational centres. At least in one case, i.e., Nalānda, a Gupta king made donations in favour of the educational institution by granting certain villages to the University. Nalānda gradually emerged as a university-town like the later-day Cambridge and Oxford. In such a town the teacher must have enjoyed the highest position.

This discussion raises an important point—were all the professionals confined to urban areas ? Naturally some of them like scribes must have been completely urban-based, others operated both in the villages and the towns. But those working in towns were certainly more skilled and better-off than their rural counterparts.

(e) *The Mercantile Community*

From the standpoint of the origins of urbanisation, the mercantile community was the most essential group which partially sparked this development and completely sustained it through its profession. But socially speaking, it had to contend with numerous hostile forces. Besides invaders from land and sea, even the great empires which in ancient times ruled India were sometimes inimical to business interests. Although these empires established peace and a stable government over wide areas—factors outwardly conducive to trade—they seemed to be jealous of the merchant's wealth and tried to throttle his activities by arrogating lucrative trade monopolies to the state, and by taxation, regulation and, at times, by outright confiscation. Finally, the status of the Indian merchant was depressed by the persistent brāhmaṇa tradition which disparaged those engaged in trade. In view of these grave handicaps the vitality exhibited by Indian traders in our period was remarkable.

Right from the early Buddhist period we hear of many *seṭṭhis* of eighty *koṭis* worth being associated with the Buddha.[40] Trading activities, however, reached a climax during the early centuries of the Christian era, a development contemporaneous with the most developed stage of urbanisation in ancient India. But from the Gupta period onwards, one can notice a general decline in trading activities. Despite anti-trading stance of the brāhmaṇical literature the merchants

never suffered on account of their profession. In fact, because of their wealth they at times were even instrumental in ushering in revolutionary changes in the society. The emergence of Buddhism and Jainism in the 6th century B.C. and the open support lent by the business community to these heterodox sects signifies an open revolt against the brāhmaṇical system by this class because of the social dominance of the brāhmanas and kṣatriyas over them. This was not a simple protest, but this was also a move by which this class ultimately freed itself from the superiority of the brāhmaṇas. Because of their wealth and social utility they came to occupy a very prominent position in the urban society and from the works of Kālidāsa it can be gathered that they were kept in the topmost social bracket along with the urban nobility.

It may be misleading, however, to regard the merchants as a wealthy class in general. There were also petty shopkeepers who sold all sorts of merchandise including meat and wine. In the *Vinaya* a group of nuns practising trades like setting up a tavern, a slaughter house, offering things for sale in a shop, engaging in usury and trade and dealing in greens and leaves, are forbidden to do so.[41] It is significant to note from this that even women could take to such professions; what is prohibited for nuns is open for the women outside the nunnery. In another instance, the nuns made a hoard of many bowls giving rise to suspicions regarding their trading intentions in bowls.[42] In this as well as in the earlier instance, *vaṇijja* is differentiated from setting up a shop. However, accumulation of goods is the prerequisite for both. This can be probably explained by the fact that *vanijja* or trading refers to wholesale transactions of goods while setting up a shop indicates retail selling of goods.

The shopkeeper (*pāpaṇika*), it is said, must have three characteristics—shrewdness, capability and ability to inspire confidence—in which case he becomes known to a rich *gahapati* or *gahapatiputta* and they easily offer him loans.[43] In his skill in raising finance, buying and selling things this shopkeeper seems to resemble a modern entrepreneur and the *gahapati* or *gahapatiputta* who gives him loan resembles a modern banker. Some of the early Buddhist texts indicate the existence of a crude business ethics guiding these shopkeepers,[44] a development

which marks the transition from barter economy to an established monetary economy in big cities like *Sāvatthi* (*Śrāvastī*).

Sometimes the texts are not explicit about certain types of trading activities. The *Dīgha Nikāya* mentions that if a man starts an enterprise (*kammante payojeyya*) after contracting a loan and if his business succeeds, he should not only be able to pay off the old debt he had incurred, but there should be surplus over to maintain a wife.[45] A clever and energetic man starts earning 1/2 *kahāpaṇas* a day in some business or other. Energetically such a man gradually makes 50 *kahāpaṇas* a day and finally 100 or 1000 *kahāpaṇas* a day. Soon he will be a rich man.'[6] Though the text is not clear on the nature of this enterprise, it can be asserted that it was associated with some business activity.

Thus, merchant communities and related groups were associated with a wide range of cross-cutting social and economic relations, albeit limited by a minimum of local regulations. But we must note that merchants have also been the conservative members of Indian society, despite being exposed to many new situations of social change. Once they found themselves in a respectable position, they refused to learn or rather permit anything new. Thus, from a socially dynamic caste, the merchants turned into a conservative group all the time conscious of preserving their own interests and privileges.

(f) *Artisans and Craftsmen*

The artisans and craftsmen were the only group of urban residents engaged in primary production. As such, socially they were the most important category of the urban population but ironically they were socially subordinated both to the exploiters and the intermediaries. However, a crucial factor that emerges from the study of the social standing of the artisans and craftsmen is the fact that socio-economically they were interlinked with the rise and decay of towns in ancient India. This is not to suggest that these people were essentially urban dwellers, there were certainly village artisans and craftsmen upon whose techniques the village economy depended, but their urban counterparts who played a vital role in the commercial economy of the towns had got completely identified

with the mercantile activities so much so that their own survival depended on the prevalence of trade.

In early India an important role was played by the artisans and craftsmen, viz, carpenters, smiths, potters, etc., who supplied the comparatively simple needs of the inhabitants. During periods of economic expansion, specially when the urban activities required colonisation of new land, skilled craftsmen were given incentives to settle in these areas by offers of free plots of land [47] Under such a dynamic state, the social standing of specialised groups was bound to vary considerably. In the early periods of urban history, they were accorded an honourable status in the society. We have a reference from an early Buddhist text that the Buddhist monks at times took to weaving,[48] a fact which illustrates that the profession of weaving was not looked down upon in this period. Similarly Megasthenes' statement that a person who destroyed the eye or hand of an artisan was put to death,[49] indicates the social value of this class of urban residents.

The situation, however, started changing towards the end of the Gupta period. This period in Indian history saw the beginnings of economic retrogression which pervaded the whole of early medieval Indian society. The artisans and craftsmen were pushed to the lowest social ladder and were completely identified with the śūdras in the sense that they came to be despised.[50] It is to be noted that in feudal societies (marked with the absence of towns) of Japan, China and Europe also, artisans occupied a very low status. The lowering of the status of the artisans and craftsmen is also attested to by the fact that the terms *śreṇī*, *nigama*, *vīthī*, *vaidehaka* and *vaideha* lost their economic connotation and generally came to signify social groups (generally untouchables) or rural units.[51]

Besides this general variation in the status of the artisans and craftsmen, the urban society never accorded a monolithic status to the whole group. Thus, to talk in terms of a general status of these people is a misnomer. The problem has to be tackled at two different levels—the social difference between various crafts and the rich and the poor within the same craft group. To begin with, our sources clearly indicate that there were certain high crafts and certain low crafts. Talking about the craft of the basket-maker (*nalakāra*), it has been specifically

mentioned that it was a low one:[52] Unlike the other artisans in the group, the *nalakāras* had to live in their own settlement,[53] most probably on the border of the cities. Even the craft of the potter, certainly one of the most important among the contemporary crafts, is regarded as a low *sippa*.[54] Naturally the members belonging to such craft groups were not treated at par with those whose *sippa* was regarded as a relatively high one.

Similarly, although we know about a host of rich craftsmen, it cannot be said that all of them were prosperous. It is well known that the weaving industry was in a highly developed state and certain weavers were rich enough to make donations, yet the life of the average weaver does not seem to be prosperous. Outside Rājagṛha a street is described as being exclusively inhabited by weavers. In it, even old weavers, worn out by age, with broken teeth, grey hair and bent and crippled bodies, are depicted as spinning thread with their old wives feeding the shuttle. Seeing two weavers, performing manual labour at that age, the Buddha could not help remarking, "There are doubtless no persons in this city poorer than these two."[55] This situation raises a pertinent problem: why was it that these weavers laboured hard and yet they were poor? To us it seems that the main cause for this situation was the exploiting role of the merchants who acted as middlemen between these primary producers on the one hand, and the consumers on the other hand. These middlemen seem to have pocketed all the profits of the industry. Thus, even among the artisans and craftsmen there were sub-groups within the seemingly monolithic association.

But there were artisans who kept themselves free from the clutches of the middleman. Such an artisan worked at his own shop and then sold his wares in the market. He combined in himself the twin functions of a producer and a trader. The shop of a craftsman finds frequent references in literary works, especially of a popular type. The house where an artisan worked was termed *āveśana* or *śilpaśālā*.[56] The usual practice was for a customer to visit the shop of an artisan.[57] Sometimes an artisan would take his wares with him and go from street to street selling the articles. In a *Jātaka* story we read of two dealers in pots and jars who apportioned a city between themselves and set about hawking their wares around the streets of their respec-

tive regions.[58] No doubt, 'self-production—self-distribution' involved a lot of trouble on the part of the craftsmen but this certainly saved them from the clutches of the middlemen.

A study of social status of artisans and craftsmen in the urban setting will remain incomplete without referring to the social consequences of their respective craft associations. To coordinate and promote their activities the members belonging to the same craft came together by forming their respective guild organisations. These had considerable judicial and executive powers[59] over the individual members and gradually came to be based on the institution of hereditary occupation. This made the life of the guilds somewhat permanent and led to their becoming closed and fixed bodies with their own rules and occupations, finally turning them into sub-castes.

A factor which facilitated the evolution of guilds into sub-castes was provided by the *Smṛti* rules placing caste rules and craft rules on the same footing. Almost all the authoritative *Smṛtis* ask the king to prescribe laws only after having duly understood the rules and usages of castes, *jānapadas*, *śreṇīs* and families.[60] Thus the guild laws were treated at par with the caste laws. It was, therefore, natural that the different occupations or crafts grouped as guilds were finally given the status of sub-castes. Gopal thinks that the assimilation of some ethnic groups in the ranks of mixed castes may also have encouraged this transformation.[61]

This unique development regarding the conversion of different industrial and craft guilds into sub-castes can be illustrated with the help of several pieces of evidence belonging to different periods of ancient Indian history. To begin with a passage in Gautama distinctly refers to the existence of separate associations of men, belonging to one and the same craft occupation, and recognises their convention and rules.[62] The rules about sacraments, originally concerning only the four *varṇas*, had to take cognisance of some occupational groups also which, though outside the *varṇa* scheme, could hardly be ignored in view of their increased social following and caste pretensions. The *Baudhāyana Gṛhyasūtra* prescribes different seasons for the initiation of brāhmaṇas, kṣatriyas, vaiśyas and *rathakāras*,[63] thus virtually accepting the status of *rathakāra* as a separate caste. The absence in the later *Dharmaśāstra* works of provi-

sions concerning the mixed castes[64] is to be connected with the gradual degradation of their social status so much so that these texts stopped taking notice of them. A passage in the *Vinaya Piṭaka*[65] has been interpreted by R.C. Majumdar[66] to yield the information that, by that time, the ethnic groups like *niṣāda* and *pukkusa* and the industrial groups of *rathakāra* and *veṇa* had formed real caste groups (*jāti*), while certain groups of occupations, including leather-workers and potters, had not yet undergone the change.[67] Another phase in this evolution is revealed by the inscriptions of the early centuries of the Christian era. Here we find that instead of mentioning the *varṇas* of the donees the inscriptions record their crafts or occupations. Some records specifically refer to the hereditary character of these occupations.[68] It is quite possible that these crafts/occupations mentioned in the inscriptions,[69] which later developed into distinct sub-castes, had come to assume even in that early period a closed and corporate status like that of a caste.

This discussion, however, brings into focus a contradictory aspect of the urban life. The urban centres which are generally regarded as centres of rationalism and anti-orthodoxism succumbed in this context to orthodoxy and brāhmaṇical pretensions. This dichotomy can be explained in terms of the gradual weakening of the urban spirit from the Gupta times when finally the sub-caste formation appeared as a distinct reality.

(g) *The Public Entertainers*

Numerous contemporary references suggest that a group of persons adopted public entertainment as a profession. Such persons were to be found in the rural as well as urban areas, but the chances of their earning more money were better in towns than in villages. The *Bhuridatta Jātaka*[70] clearly reflects the mind of such entertainers who flocked to towns to earn more and more money. In fact, towns became the area of activity for musicians, singers, actors, dancers, acrobats, etc., who received encouragement as well as patronage from the state as well as other affluent sections of the urban society.

The literary texts are full of references to musicians like drummer, conch-blower and lute-player, and musical instru-

ments like drum, conch, tambour, tambourine, different kinds of cymbals, lute, gong and other musical instruments.[71] One of the texts informs us that 100 musical instruments were played in the house of Subandhu on the occasion of a birthday party.[72] The works of Kālidāsa are replete with references to various types of musicians. It seems that by the end of the Gupta period the *vīṇā*, which had been the most popular musical instrument of ancient India, had begun to go out of fashion, and its place was largely taken by a lute with a pear-shaped body, played either with the fingers or with a plectrum.[73] Anyway, all these references presuppose the existence of a good number of skilled craftsmen who prepared different musical instruments made of clay, reed, bamboo, metal, leather, etc.[74] The popularity of song and music also suggests the presence of a class of professional music teachers to teach girls and boys of well-to-do families. Vātsyāyana includes music in the list of his sixty-four arts which were essential to be mastered by a cultured *nāgaraka*.[75] This not only attached some prestige to this profession but also prepared a group of music teachers to help the upper class urbanites master this art.

Our sources also speak of dance performed by professional dancers. They earned money by performing private or public shows and received patronage and encouragement from the urban population. The ancient literary texts make references to this art. The poses and gestures are classified in detail, even as early as Bharata's *Nāṭyaśāstra*, which mentions 13 postures of the head, 36 of the eyes, 9 of the neck, 37 of the hand and 10 of the body.[76] Later texts classify many more poses and gestures, every one of which depicts a specific emotion or object. With so many possible combinations the dancer could tell a whole story, easily comprehensible to an observer who knew the convention. Apart from these literary references, some of the Gandhāra and Mathurā sculptures depicting a young man and his wife playing on a tambourine and keeping time with his left feet, his wife playing on a two-stringed mandoline, the dancing pose of a lady carved on a round pillar, and similar other scenes,[77] strongly suggest the popularity of dance in ancient India. The *Kāmasūtra* and the Ajantā frescos corroborate this situation.

The contemporary literary texts also refer to different types

of dramas and actors. The *Mahāvastu* refers to the actors of Mathurā who went as far as Banaras to perform dramatic plays.[78] *Nāṭaraṅgasabhā* or dramatic stage, *yavanikā* or curtain, *nepathya* or back-stage, actors, mock-dancers, actresses and public theatre of the city are referred to in contemporary texts. Moreover, the *Nāṭyaśāstra* describes ten kinds of plays,[79] and the *Rayapaseniya* mentions as many as thirty-two kinds of dramatic plays.[80] These references not only indicate an advancement in the field of dramatics but also illustrate their popularity. Most probably, groups of persons adopted acting as their profession, either independently or in groups or might have been attached to the royal courts. The importance of actors and their wealth is reflected by a Kuṣāṇa inscription which records the setting up of a stone slab in the place of the abode of Dadhikarna by the sons of the actors of Mathurā.[81] Some writers have discerned Greek influence on Indian stage. The curtain at the back of the stage was called *yavanikā*, a diminutive form of the name by which the Greeks were generally known in India. One play at least, the *Mṛchchhakaṭika*, has a superficial resemblance to the late Greek comedy of the school of Menander.[82] We cannot preclude the possibility of the Greek comedies (acted at the courts of the Greco-Bactrian kings of north-western India), inspiring unknown Indian poets to develop their own popular stage into a courtly art form but that is a conjecture hazarded by scholars.

Under the present context mention may also be made of other entertaining groups like jesters, wrestlers, rope-dancers, snake-charmers, etc. The *Kāmasūtra* even refers to *vita*, *vidūṣaka* and *pithomarda*. These persons were known as *upanāgarakas* and were advised to earn their bread with the help of *nāgarakas* and *gaṇikas*.[83] But the social status and the economic position of all the entertainers was not satisfactory. A low caste entertainer (*chaṇḍāla-vaṁśika*) and his assistant (*antevāsi*),[84] apparently acrobats, seem to be poorer and socially inferior. The term literally means born of a *chaṇḍāla* lineage and indicates an extremely low ritual status, a fact attested to by the relationship between the acrobat and his assistant. It is a commonplace that at the lowest level of the social hierarchy, the sophisticated rules which differentiate social status in inter-personal behaviour seldom apply. It is perhaps for this

reason that we find that the *chaṇḍāla-vaṁśika* and his assistant address each other as *sammā*, a term denoting familiarity which is used by the people of equal status.[85] Thus, in the urban society a class of professional entertainers subsisted on such acts of entertainment as dance, music, drama, acrobatics, etc., but all of them neither enjoyed an honourable status in the society nor were all of them economically well off.

(h) *The Prostitutes*

The institution of prostitution was essentially an urban phenomenon.[86] The beginnings of urbanisation led to the emergence of a class of alienated women who took to this profession for their subsistence. The great prestige attached to them appears vividly in the story of Āmrapālī in the *Vinaya* texts.[87] She was the daughter of Mahānāma, a rich citizen of Vaiśālī. Many suitors, including princes, having sought her hand, her father brought the matter to the notice of the Lichchhavi *gaṇa* and it was discussed in the Assembly. When the members saw Āmrapālī, they decided that she was a *stri-ratna* (jewel of a woman), and so, we are told, according to the convention already laid down, she was not to be married to anybody but was to be the property of the *gaṇa*. Āmrapālī, in due course, became so famous that even Bimbisāra visited her and his son by her enjoyed a high position at the court. Once she was also the host of the Buddha to whom she gifted a garden.[88]

The Mauryas even extended state patronage to the institution of prostitution. Under them, prostitutes were protected against being maltreated. Kauṭilya reveals the same state of things. A prostitute, noted for her beauty, youth and accomplishments, was to be appointed as superintendent of prostitutes (*gaṇikādhyakṣa*) on a salary of 1,000 *paṇas* (per annum), together with a rival prostitute on half that salary.[89] Detailed rules are laid down for regulating the profession and two days' earning every month had to be paid to the state. They had to attend court and were regularly employed in the royal household on a good salary. They held the royal umbrella, golden pitcher and fan and attended upon the king. They were also employed in the storehouse, kitchen, bath-room and the royal harem. They could also, if necessary, be called upon to act as

spies for the state. Megasthenes also took notice of this practice.[90]

As to the accomplishment of this class, for the first time we come across a detailed description in Kauṭilya, who tells us that "those who teach prostitutes . . . arts such as singing, dancing, acting, writing, painting, playing on the instruments. . . shall be endowed with maintenance from the state."[91] Thus, it seems that state patronage to the prostitutes continued during this period indicating thereby their honourable status in the society. The deep association of royalty with this profession has prompted Basham to conjecture that the position of the courtesan merged with that of the concubine,[92] a fact which cannot be corroborated by the available historical evidences.

Even under the Kuṣāṇas, a somewhat similar policy to that of the Mauryas was followed in this respect. A chief of the public women was appointed, who was called *Varamukhya* and their area operation of was known as *gaṇikāvīthī*.[93] They seem to be the counterparts of the Mauryan *gaṇikādhyakṣa*. It seems that, like the Mauryas, the royalty was very much associated with the prostitutes, thereby safeguarding a high social status for the latter.

Prostitution, as a profession, continued to thrive during the Gupta period. Vātsyāyana enjoins that along with the art immediately essential to her profession, she should be thoroughly trained in the sixty-four arts.[94] This list included not only music, dancing, singing, etc., but also fencing with sword and staff, archery, gymnastics, logic, chemistry, etc.[95] It is hardly likely that the prostitutes really studied all the arts of this rather bizarre list, but it shows what was expected of them and what was their image in public. If anyhow she mastered these arts a bright future awaited her. According to Vātsyāyana, "A public woman endowed with a good disposition, beauty and other winning qualities, and also versed in the above arts . . . receives a seat of honour in an assemblage of men. She is, moreover, always respected by the king and praised by the learned, and her favour being sought for by all, she becomes an object of universal regard."[96] Obviously, the courtesans enjoyed a high social status.

It is significant to note that there is a whole section of urban dramatic literature in Sanskrit, known as *bhāṇa*, of which the heroines are courtesans and the scenes are laid in the streets of

pleasure. From the *bhāṇa* literature we learn that the courtesans were renowned for their beauty, wit and other accomplishments, as well as their wealth and luxury. Occasionally in the character of Vasantasenā in the *Mṛchchhakaṭika* of Śūdraka and those of Rāgamañjari and Chandrasenā in the *Daśakumāracharita* of Daṇḍin we come across courtesans, who deliberately gave up their profession and, after braving all sorts of persecution, united themselves with men of their choice. But such characters were rare and belonged to the upper class of prostitutes.

In fact, in our period all the prostitutes did not enjoy a high status in the society and all of them were not rich. The prostitutes with no or little knowledge of the sixty-four arts were looked down upon. They merely satisfied man's sexual lust as long as they were physically acceptable and afterwards spent their days in misery. There were certainly many poor and cheap prostitutes, who would end their days in beggary, or as menials or work women. The Buddhist texts refer to the common prostitute, the *vesī*, but generally the sources are silent on this point. This was obviously because of the fact that the Sanskrit literature of the class-ridden society of our period depended for its survival on the patronage of the rich, and was mostly preoccupied with the adventures of the royalty and the upper strata of the society finding hardly any space to devote to the masses. Anyway, it seems that these prostitutes constituted a class separate from the courtesans, the typical high class public women comparable to that of Apasias and Phrynes of classical Greece.

The total urban association of prostitution is also reflected from the constant attack on this institution by the *Smṛti* writers. The *Smṛti* writers who did not tolerate specific urban institutions went all out to degrade and denounce the prostitutes.[67] This situation may be contrasted with the attitude of the urban-oriented religion Buddhism, which not only treated them humanely but also allowed them to become nuns in the Buddhist monasteries.[68]

(i) *The Tertiary Group*

The urban economy which sustained a host of diverse elements also came to support a group of people who participated

neither in the organisation of production, nor distribution or production of goods. This group can be roughly called the tertiary group. In this group of people we can put members of different callings like garland-makers, barbers, washermen, domestic servants, etc. Of these occupations, the barber seems to be the most important. His sons, who follow the same craft when he is old, go round the local community offering their services in exchange for food to be used, in one case, for giving meal to the Buddha and his disciples.[99] He also acts as a messenger for the brāhmaṇas.[100] When the Śākya youths go out of their country to join the order, he is their servant-companion and the recipient of the personal belongings (*alaṁkāra*) of his masters.[101]

Then there were washermen who washed the clothes and returned them to the owner.[102] The work of washing and dyeing was done by the same person.[103] Throwing light on this topic, the *Majjhima Nikāya* says that before dyeing the cloth, the washerman first used to clean it thoroughly, so that it may absorb the dye properly.[104] Kauṭilya forbids them to wear, sell, mortgage and hire clothes belonging to others.[105] This reference clearly shows that there were some dishonest washermen who deceived the public by unfair devices and the state probably had to enforce a law to check it. They had to inhabit in a particular locality meant for them.[106]

The other similar occupational groups were those of garland-makers, servants and persons who performed non-productive works for others on payment. In a society, where wealth came to be concentrated in the cities, this group of people were more in demand for performing personal works of the persons who could afford to pay for it. This group played no role either in basic or secondary production and hung like leeches to the more prosperous sections of the society. They were a group of people essentially useless for the social system but at the same time a necessary evil of the expanding urban economy. It was because of this class that the ruling elite as well as the rich merchants could obtain leisure, so necessary for the development of the sophisticated culture of the cities.

The discussion about the social role of the tertiary group raises a fundamental question about the urban society, i.e., the nature of the urban class division.[107] From the above discussion

about the various urban professional groups we can conclude that they can be categorised into two groups: (i) the upper class urbanites consisting of the king and his higher administrative and military personnel, the priest, the rich merchants and craftsmen, the high class courtesans and some of the relatively prosperous independent professionals; and (ii) the lower class urbanites consisting of the poor shopkeepers and craftsmen, low class prostitutes, some of the despised professionals and lower administrative and army personnel. The tertiary group too can be roughly divided into two segments: (i) the public entertainers, who in a sense were the custodians of culture; and (ii) the persons performing generally personal and menial jobs for rich clients on payment. That the urban society was divided into groups is also obvious from certain references in our sources. Aśoka's *dhamma* was a deliberate attempt to free the society from tensions resulting as a consequence of the existence of such groups in the urban society. Moreover the origin and development of legal and judicial system, which is an important weapon of coercion in the hands of the ruling class, in this period hints at such a social formation.

Despite the caste/class differentiation, the urban society was marked with certain tendencies leading to mobility at certain levels. The continuity of the social system of caste has led to an erroneous view that society in pre-British India was basically static, monotonous and stationary. Earlier writings of the imperialist school[108] had characterised social immobility as a characteristic of the 'oriental' as opposed to the progressive mobility of the 'occidental'. This is not to advocate that social mobility resulted in the elimination of the system. Perhaps, it is because of the fact that the characteristic social system has not been restructured that it gives us the commonly depicted 'static' view. This has essentially been a result of assigning to the normative values undue importance. But we know that major changes and adjustments, sometimes socially quite revolutionary in nature, took place at the operative-organisational level in terms of various interactional relationships. The necessity of this fluidity and flexibility is obvious, if the system was to survive, especially in view of the fact that people have to adjust not only to the dynamics of the natural variations but also to new and continuous incoming social and cultural groups. There

has been a great deal of adjustment to new social and economic situations whereby various sub-castes or *jātis* came into existence. These processes are clearly related to continuously changing socio-political and economic systems, cultural movements, as well as demographic spread to marginal areas that were brought under cultivation.

At another level mobility may be seen in the close relationship that existed between social and political order, i.e., under early Indian law it was the king's responsibility to prevent the confusion of castes and also to change caste-stutus and create new castes.[100] This was natural because the maintenance of a social system necessarily requires the backing of force, for the mere priestly or sacred authority, at times, fails to impose its will and tenets. Such political power belonged not only to the king, but it also lay in the hands of officials and merchants who at times became the arbiters of society's destiny. Instances exist of ambitious and unscrupulous officials who took advantage during periods of political confusion to establish their own chiefdoms or kingdoms. We also know of several examples of how lower 'caste' groups have raised their status to that of kṣatriyas, the example of śūdra Nandas is a case in point.

At times social mobility was also a result of spatial mobility, specially of those families which were excessively oppressed either politically or socially. In this context the socio-religious movements played a crucial role. Take, for example, the origin of Buddhism and the spontaneous support it got from the lower *varṇas*. Naturally because of the new urban setting and increasing trade, the vaiśyas assumed a position where they could not only challenge the orthodox social system but could even opt for a new one. Their support to Buddhism certainly initiated a process which led to significant readjustments in the social system. As this religion was basically urban, it led to a vital change in the brāhmaṇical set-up. The newly vaiśya-turned-Buddhists came to occupy a status almost at par with the hitherto over-privileged brāhmaṇā and kṣatriya castes.

Again there were three main avenues whereby a 'foreign' group could enter into the social system. One, at the level when tribes became untouchables, was by both modifying and

retaining their original features.[110] The next possible avenue was at the level of dominance, viz, when large or small kingdoms were conquered by 'foreigners' politically, yet socially it was the 'conversion' of the invaders which took place. Similarly trade allured a host of foreign trading communities; many of whom soon became Indianised in their cultural habits and behaviour finally getting a place in the brāhmaṇical society. This method of 'reabsorption' is a social process which explains historical movements (mobility) better than 'tolerance' and 'melting-pot' concepts. The orthodoxy, of course, made efforts to prevent social assimilation by invoking the codes of Manu.[111] However, this social rigidity, on the one hand, failed to make any perceptible impression upon the rationalistic urban society and, on the other hand, not only gave Buddhism and Jainism further support, especially from the merchant class, but also converted the Greeks, the Kuṣāṇas and the Śakas to the new sects on the basis of new sub-castes or *jātis*. It this turmoil, śūdra groups, by changing occupations and by being associated with localities that were reserved for foreigners, attained higher social rank.[112] Consequently, for the orthodoxy this stage of social readjustments was one of crisis, especially the new sub-caste formations that led to upward mobility of lower castes. This is betrayed by a feverish activity of rewriting and reinterpreting law-books in this period which emphasised the inherent superiority of the brāhmaṇas.[113]

A thorough examination of sacred texts and legal codes significantly reveals the same process of social mobility. The very insistence on drawing up firm demarcations of social groupings in the law-books is a sure sign of mobility in practice. This rigidity had hardly a chance of corresponding to real categories, because the theory of four castes is only a deliberate simplification which ignores the multiplicity of various societal sub-systems. A socio-cultural analysis of historieal data clearly suggests that the enumeration of various mixed castes and the explanations by Manu are really justifications after the actual development had taken place. These texts betray the embarrassment of a theoretician facing facts contradicting his theory. Therefore, we should not trust the illusions of brāhmaṇical tradition, because these are, in most

cases, later textual rationalisations. Their statements only imply that strict hierarchy had never really existed, and marriages were always taking place between those of superior and inferior status.[114] Thus, there was a constant breakdown of the rules regarding endogamy and mixed-castes, the products of inter-*varṇa* unions are clear illustrations of this development. This is further confirmed by the rules and regulations of inheritance. For instance, it was only if a man had a son by equal or inferior woman that inheritance rights were considered, i.e., the right of inheritance was identified with legitimacy. It betrays the sentiment that while it was hoped that marriages should be solemnised within the *varṇa*, it was also realised that all children are not born in this way. These difficulties are mentioned in many texts all concerned to link marriages and unions, wives and children in relation to each other, especially those occurring outside textual codes.[115]

It is thus clear that the urban system allowed social mobility as well as adaptation. A concentration on textual evidence or over-emphasis on the non-competitive basis of caste is, however, tantamount to binding ourselves to the actual competitions and rivalries which have existed throughout history and which have played an important role in facilitating social mobility. The brāhmaṇa kṣatriya conflict of the 6th century B.C. is a relevant instance. It seems that the struggle between these two caste groups was mainly aimed at controlling the social surplus as well as assuming a decisive status in the society.[116] Due to attack on brāhmaṇism by the two nascent heterodox religions as well as the growth in royal power and pretensions,[117] the kṣatriyas were probably encouraged to repudiate the supreme authority of the brāhmaṇas. This situation is corroborated by the absence of any antagonism between the poor brāhmaṇas and the kṣatriyas[118], the struggle was confined to the two elite groups. The first place accorded to the kṣatriyas in the list of castes enumerated by the Pāli texts has to be explained in terms of differing social status of the various castes.

The problem of mobility in urban society can be considered from another point of view also. If 'mobility' means 'freedom' as in Western society, in the sense of being able to choose the place of domicile, to gain a basic livelihood, the

ability to have economic activities and mix socially, to choose a marriage partner of one's own liking, and to decide one's relations with supernatural powers, even then the urban society of ancient India can be treated in a sense as mobile. Although our sources refer to certain categories of artisans and craftsmen inhabiting a fixed area of the city, they were free to migrate from that place to another; majority of the city population had no bindings at all about the place of their residence. That only the professionals either connected with the organisation of production or distribution of goods or the tertiary class inhabited the cities is a valid proof to suggest that every urban dweller had the right to gain a basic livelihood. Similar was the case with the next criterion—the ability to have economic activities and mix socially. But there were certain limitations. While the ability to have economic activities was an accepted fact of the ancient Indian urban society, mixing socially was not something universal. But due to lack of caste-ritual taboos in urban society isolationism of social groups was not a reality and social mixing, though on a limited scale, seems to be the order of the day. The ancient urbanite, however, does not seem to have a complete discretion in choosing his marriage partner. This is not to say that all the marriages were settled by those other than the partners themselves and that every marriage had to be performed within the same *varṇa*. In fact, the widespread prevalence of *gandharva* form of marriage[119] as well as numerous references to inter-*varṇa* marriages indicate that this practice too was not very uncommon with the urbanites. Coming to the last criterion, i.e., to decide one's relations with supernatural powers, it can be said with certainty that the urban society was free from complete religious domination. The very fact that Buddhism and Jainism attracted a large number of followers to their fold betrays the fact that the urbanites were free to choose their own religion or, if Chārvāka is to be believed, no religion at all.

This discussion raises a fundamental issue connected with urban mobility, i.e., the contractual freedom in an urban milieu. Prevalence of contract which was so common in the non-urban and even in early medieval India was a barrier discouraging mobility. A slave, so often mentioned in the Buddhist and other indigenous sources, could hardly make

himself free in the villages and hence for him mobility was something unheard of. The situation in the urban setting was somewhat different, contract had no place in it and even the contract with which we are at times confronted with, is of an altogether different nature. We hear of time-bound contracts between artisans and craftsmen on the one hand, and consumers or secondary producers on the other hand.[120] But this type of contract was voluntary and at the same time purely momentary and temporary in nature. The next type of contract forthcoming from this period is that of the merchant and artisan guilds, but here too the contract was voluntary; it was the product of a competitive urban economy and had nothing to do either with loss of freedom, or social domination. Thus, contractual freedom, which is an important prerequisite for mobility in a society, dominated the urban scenerio.

Although the much-talked-about orthodox social ideology placed a high premium on conformity which was to manifest itself in terms of social immobility, yet a person's attitude to religion in the urban surrounding was considered an entirely private affair despite brāhmaṇical law-givers' attempt to impose their own will over the whole populace. This raises the question of the secularisation of the urban spirit. Secularisation is an astonishingly modern phenomenon and its blind application to pre-modern context might give a wrong orientation to the existing situation. But the concept of secularisation can be applied to the ancient Indian urban context in a very broad sense rather in a primitive sense, and that will roughly mean the absence of the dominance of the magico-ritual cult over society, which was so striking a feature of the rural milieu. To be more precise, secularisation in our context will denote the lack of the dominance of brāhmaṇical tradition over society. A marked feature of the ancient urban life was the absence of religious persecution and the denial of the normative values of brāhmaṇical tradition. This situation is reflected from the fact that the support that the heterodox religions of the 6th century B.C. got was mainly from the urban centres and even the much-talked-about anti-Buddhist king Puṣyamitra Śunga, who is said to have led a brāhmaṇical revolt against the Buddhistic values of the Mauryas, was a pro-Buddhist in the final analysis. Religious persecutions appeared on the Indian scene only in the

early medieval period and by that time urbanism was not a force to reckon with. Religion was not the driving force in the urban milieu, a fact which is also attested to by the gradual decline in the status of the *purohita* in our period. Thus, the picture that emerges from a study of the urban society of our period very well corresponds with the type of secularisation that was within human reach at that time; the dominant partners in the contemporary set-up were the economic, political and non-religious forces.

Religion breeds orthodoxy and conservatism. The hold of religion over a society will mean the dominance of the normative values which in the Indian social context meant sticking to one's hereditary profession, a situation which was detrimental to the social concept of mobility. So, naturally when the urban society was 'secularised' it apparently paved the way for social mobility.

The above discussion reveals two important features of ancient urban society, i.e., it was divided into three distinct classes and social mobility was not uncommon. In the urban society on the one side of the scale were the organisers and exploiters of producers and on the other side the primary and secondary (at times even organisers and exploiters) producers; somewhere on the scale were those belonging to the tertiary groups, performing duties which were socially useless and subsisting like leeches. This society generally ignored the normative of the brāhmaṇical system and social mobility, unlike in the rural surroundings, was a marked feature of the society characterised by 'secularisation' and contractual freedom.

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2. E. Durkheim, *The Division of Labour in Society*, III. (1947); M. Weber, *The Theory of Social and Economic Organisation* (1947), Ch. I.
3. To settle the differences of the guilds a king of Banaras is said to have created the post of a *bhaṇḍāgārika* having a supreme judgeship over all guilds (*Jātaka* IV. 43). Similarly when the guilds indulged in acts opposed to the interests of the king or those of a contemptible nature, the state applied a decisive check to their activities (*Nārada*, X. 4. 5, 7).

4. This is true of even certain modern societies.
5. L. Mumford, *op. cit.*, pp. 126-33,
6. The Indus Valley urban society may be treated as an exception.
7. The *purohita* was one of the most powerful members of the Vedic society and and at times he was second only to the king. Cf. R. S. Sharma, *Aspects of Political Ideas and Institutions* in *Ancient India* (1968), pp. 263ff.
8. For details, see V. K. Thakur, 'Relative Position of the Brāhmaṇas and Kṣatriyas in the Age of the Buddha', *Hindutva*, Vol. VII, no. 5, pp. 16-21, 32.
9. *Ibid.*, p. 32.
10. R. S. Sharma, *op. cit.*, pp. 278-79.
11. *Arthaśāstra*, IV, 3.
12. Even Kauṭilya who accords a high place to the *purohita* in his scheme of things, unhesitatingly attacks the brāhmaṇas when he talks in terms of the exaltation of the royal authority. Though basically the Kauṭilyan state upholds the brāhmaṇical ideology as set forth in the early law-books, it would be wrong to think that it is subservient to an all-potent sacerdotal authority, a characteristic which has been ascribed to the Indian mind in general (Senart, *Caste in India*, 1939, p. 204). For it disregards and even suppresses those religious practices which undermine the authority of the state and even tries to exploit religious sentiments of the people for serving the ends of the state. For a detailed analysis, see R. S. Sharma, *op. cit.*, pp. 179-200.
13. *Ibid.*, p. 296.
14. *Ibid.*, p. 296, fn. 1.
15. *Jātaka*, I. 4; II. 220; III. 421; V. 531, 544.
16. *Ibid*, I. 105; II. 155; III. 318, VI. 544.
17. *Arthaśāstra*, V. 3.
18. Cf. R.S. Sharma, *op. cit.*, p. 286
19. *Vinaya Piṭaka*, I, p. 269.
20. *Ibid.*, IV, p. 308.
21. *Aṅguttara Nikāya*, I, p. 26.
22. *Vinaya Piṭaka*, I, pp, 270ff.
23. Ibid., I, p. 273.
24. *Dīgha Nikāya*, I, pp. 48-50.
25. *Vinaya Pitaka*, I, p. 215.
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27. *Manu*, X. 47.
28. I. 6. 19. 14; 6. 18. 6-18 and 21.
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33. R. S. Sharma, *op. cit.*, p. 280.
34. *Jātaka*, II. 155.
35. *Kāmasūtra*, VI. 1. 9.
36. *Vinaya Piṭaka*, IV, p. 6.
37. *Ibid.*, I, p. 77.
38. *Yāj*, XXX, 336.
39. For a detailed study of the kāyasthas, see V. K. Thakur, 'Origin of the Kāyasthas : A Historical Probing', *Journal of Historical Research*, Vol. XIX, no. II. pp. 21-43.
40. Besides the well-known munificence of Anāthapiṇḍaka, the Buddhist sources refer to half a dozen *seṭṭhis* who built monasteries for the Buddhists.
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56. *Amara.*, II. 2. 7.
57. *Jātaka*, V. 514.
58. *Ibid.*, 1. 3.
59. *Majjhima Nikāya* 41, 114, *Vinaya Pitaka*, IV. 226; *Yāj.* II. 30; *Bṛhaspati*, I. 29.
60. Cf. *Manu*, VIII. 41.
61. L. Gopal, 'Economic Groups and the Caste System in Ancient India', *Journal of Indian History*, Vol, XLIII, pt. III, pp. 778-79.
62. XI. 21.
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68. *ASWI*, IV, p. 83, no. 1; p. 86, no. 14.
69. Cf. *EI*, X, Index.
70. *Jātaka*, VI. 543.
71. Ibid., I. 59, 60; II. 327; VI. 544.
72. *Mahāvastu*, II, p. 375. Five types of musical instruments are also mentioned in this text (p. 142). The text places musicians in the category of *Gandharvikas* (III, p. 443). For musicians and musical instruments, also see *Lalitavistara*, V, pp. 75-6; VII, p. 121; *Saddharma Puṇḍarika*, II. 29, 89-91; *Śilappadikaram*, I. III. 26-36ff; *Aṅgavijja*, p. 160 and *Kāmasūtra*, III I. 16.
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78. II, p. 169.
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84. *Saṁyutta Nikāya*, V, p. 168.
85. Cf. *Vinaya Piṭaka*, III, pp. 13-14.
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96. *Ibid.*
97. Cf. V. K. Thakur, *op. cit.*, pp. 239, 243.
98. Cf. R. S. Sharma, 'Material Background of the Origin of Buddhism', *Das Kapital Centernary Volume*, (eds. Mohit Sen and M.B. Rao, 1968), p. 64.
99. *Vinaya Pitaka*, I, p. 249.
100. *Dīgha Nikāya*, I, p. 225.
101. *Vinaya Piṭakā*, II, pp. 182-83.
102. *Saṁyutta Nikāya*, III, p. 351.
103. *Dīgha Nikāya*, II, p. 50.
104. I, 36.
105. *Arthaśāstra*, IV. 1.
106. *Jātaka*, IV. 81.
107. Take, for example, the terracotta finds from this period. They clearly betray a distinct division in the urban society. Cf. D. Desai, 'Social Background of Ancient Indian Terracottas (*circa* 600 B.C.-A.D. 600)', *History and Society* (ed. D.P. Chattopadhyaya), pp. 143-65. Similar inferences might be deduced from the pottery finds. The NBP and its associated finds can be explained in terms of their distinct social milieu. The Kuṣāna red ware also provides a similar impression.
108. It was on the basis of the writings of these imperialist historians that Marx came to formulate his erroneous concepts of "unchanging village communities of the east" and the "Asiatic mode of production".
109. S.C. Malik., *op. cit.*, p. 120.
110. Cf. L. Gopal, *op. cit.*, pp. 778-79.
111. Cf. V.K Thakur, 'Economic Condition of Śūdras in Manu—A Study in Contemporary, Class Structure', *JBRS*, Vol. LX, pts. 1-4, pp. 143-53.
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116. For details of this struggle, see V.K. Thakur, 'Relative Position of the Brāhmanas and the Kṣatriyas in the Age of the Buddha', *Hindutva*, Vol. VII, no. 5, pp. 16-21, 32.
117. The advent of iron technology made the kṣatriyas stronger. It revolutionised the military technique and added to their strength (cf. *idem*, 'Origin and Growth of Buddhism in India', *The Maha Bodhi*, Vol. 85, nos. 2-3, p. 38).
118. *Vinaya Piṭaka*, III, pp. 10, 103; IV, 81, 197.
119. The *bhāna* literature is full of instances of this type.
120. *Buddhist Legends*, Vol. 30, 'pt. 3, p. 15.

5

Urban Culture

THE city, which is essentially the epitome of certian fundamental changes at the most primary level typified by the growth of a new technology, breeds, in turn, a cultural superstructure basically conforming to the new changes in the socio-economic structure and generally reflecting the new requirements of the urban elite. The new culture was quite distinct from the pre-urban or the contemporary rural cultures in the sense that it reflected an ethos which was typically urban in spirit; it was a product of the various cross-cultural currents emanating from certain distinct cultural groups who had flocked to the city. The process of acculturation was intensely going on within the city walls and the culture emerging therefrom was, at times, even transmitted to the non-urban milieu.

The urban culture, therefore, was an open body of contents and a fluid set of relationships. Its vitality was articulated by its response to and adjustments with every intruding system

without completely disturbing the formative aspects. In fact, in the context of an enduring civilisation, while the contents of a system may change, its nature never changes because the contents of the operative sub-systems establish and maintain norms or sense-values. That is why sociofacts and cultures are reproduced like artifacts, often in precisely the same way. For instance, even if men migrate to faraway areas, such as when groups of Indian immigrants reached the shores of another nation, they tend to reproduce similar sociofacts in terms of the symbolisation of the concepts and motives held by its people. This may partially explain the growth of cities in early South East Asia.[1]

Besides the urban-rural contact, a third force which plays a dominant role in the making of the urban culture is the presence of foreigners. As trade was a common parameter of urban development, coming together of people of diverse cultures was a natural phenomenon. War too, at times, played precisely the same role leading to a process of acculturation.[2] This raises the question of the role of migrations in the making of culture. Migrations, with all the incidental collisions, and conflicts and fusions of peoples and of cultures which they occasion, have been accounted among the decisive forces in history. "Every advance in culture", says Bücher, "commences, so to speak, with a new period of wandering", and in support of his thesis he points out that earlier forms of trade were migratory, that the first industries to free themselves from the household husbandry and become independent professions were carried on itinerantly. "The great founders of religion, the earliest poets and philosophers, the musicians and actors of past epochs, are all great wanderers."[3] Although Bücher has overemphasised the role of migrations, yet he succeeds in driving the point home. In the ancient urban context while the mobility of individuals was limited, the migration of peoples was a relatively common historical event. The consequences, however, of migration and mobility seem, on the whole, to be the same. In both cases the "cake of custom" is gradually torn asunder and consequently the individual is freed for new enterprises and new associations. One of the consequences of migration is to create a situation in which the same individual finds himself striving to live in more

than one diverse cultural group leading to the process of acculturation and ultimately resulting in the formation of a distinct urban culture.[4]

The formation of a distinct urban culture is also conditioned by the new technological base. The city which is virtually the manifestation of the changes at the primary productive level articulates, in turn, the cultural requirements of the technologically based urban groups. The technology of the urban civilisation is essentially a surplus-oriented one. Naturally it breeds an ideological framework, at least within the phenomenon of material development. This type of situation leads to the emergence of a culture which derives its basic nomenclature from a material ethos, and, therefore, an urban culture is essentially a culture more dependent upon and more connected with the material requirements of the people. It is here that one can draw a line of demarcation between the two cultural formations—rural and urban. Urban culture is the manifestation of a relatively developed technology whereas rural culture is the product of an economy based on self-sufficiency. In fact, materialism dominates the urban cultural scenario as it dominates the urban social system.

Like the urban society, urban culture too has a basically secular framework. Its secularism stems from the fact that because of its economic utility and basis it hardly needs a strong dofe of ecclesiasticalism to rationalise its existence. The very lack of a magico-ritual authority to regulate the forces of urbanism leads to novel experiments in the city's cultural life. The origins of secular literature, drama, art and other cultural manifestations are some of the instances which corroborate this point. Allied with the process of secularisation is the growth of a liberal spirit which pervades the urban scene. Conservatism becomes a casualty and hence urban cultural formation is hardly an extension of the tradition-dominated culture of the village. In the urban milieu there are groups which hardly conform to the traditional norms thereby lending culture a non-orthodox outlook. Take, for instance, the Indian merchants who crossed the seas without paying any heed to the *śāstric* injunctions which forbade such a practice.[5]

The element of group orientation in the analysis of cultural traits brings into focus the concept of composite culture. The

use of the term urban culture without any qualification is an over-simplification of the existing situation and might confuse the whole issue. By an unqualified use of this term the picture that might emerge is of a composite culture, of a culture which represents the whole urban population and each urban group. Such a picture is out and out misleading because it blatantly ignores the existence of diverse social and economic groups in the city. A broad categorisation of the city's social system indicates the presence of two divergent groups—the economically rich and socially high, and the economically poor and socially low. That means urban society is a society composed of two divergent groups whose standards of living, mutual interests, etc., completely differ. How can they breed the same culture? Naturally, in the urban centres there are at least two types of cultural patterns—one of the leisure class and reflecting a certain degree of refinement and the other of the labouring class reflecting a certain degree of crudeness. Thus from the social point of view, urban culture has to be treated from two differing angles and at two altogether different levels. Together with these differing patterns of culture, the towns also experience to some degree the continuance of a variety of cultures of the foreign groups and that of faraway rural areas because of the concentration of these diverse peoples within the city walls. In this case, however, divergence is only a matter of time because the process of acculturation tends to absorb them within the mainstream. Generally the higher culture of the city enriches itself from this process adding new feathers to its cosmopolitanism.

An important aspect of urban culture is its emphasis on individualism. Durkheim suggests that the development of the division of labour has for its principal cause an increase in the density of a society.[6] An increase in the overall density of population brings with it an increase in what Durkheim calls 'moral density'. By this he means increased facilities for transportation and communication throughout the area over which social contacts take place. Durkheim then summarises his argument, "The division of labour varies in direct ratio with the volume and density of societies; and if it progresses in a continuous manner in the course of social development, it is because societies become regularly denser and generally more

voluminous."[7] Among the consequences of such a development of diverse specialist occupations, according to Durkheim, is the growth of individualism; "far from being trammelled by the progress of specialization, individual personality develops with the division of labour".[8] He points out that in more primitive and pre-urban societies each man resembles his companions; there is little differentiation of tasks and it is the corporate life of the tribe which, so to speak, occurs in each and every man. But with the development of specialisation there is increasingly for each man "something in him which is his alone and which individualizes him, as he is something more than simple incarnation of the generic type of his race and his group".[9] More recent works in the field of sociology confirm this view of the development of individualism in societies characterised by developed occupational specialisation, particularly where this is found in an urban society. Louis Wirth points out that "in contrast with earlier, more integrated societies, the social life of the city provides much greater *potentials* for differentiation between individuals".[10] In fact, it is the city which tolerates the personal idiosyncrasies of the individuals and thereby adds to its culture a more distinct individualistic trait.[11]

The last point to be discussed in this context is related to the methodology and approach for the study of an urban culture. This raises the question of time perspective. The cultural role of cities may be considered from at least three different time perspectives. In the long-run perspective of human history as a single career,[12] the first appearance of cities marks a revolutionary change: the beginnings of civilisation. It has been emphasised that the history of every civilisation is the history, not of its countryside, but of its cities and towns; civilisation means the city, and the city means civilisation. Man originally built the city, and the city, in turn, civilised him.[13] He became a citizen when he became a member of a city-centred state, and with the rise of the world-city, as Spengler tells us, "There were no longer noblesse and bourgeoisie, freemen and slaves, Hellenes and Barbarians, believers and unbelievers, *but only cosmopolitans and provincials.* All other contrasts pale before this one, which dominates all events, all habits of life, all views of the world."[14] The city, despite Spengler's exagge-

ration, is one of the most important of all kinds of social differentiation and a type of civilisational symptom as well as civilising force. Within this perspective cities remain the symbols and carriers of civilisation wherever they appear. As such, the story of civilisation may then be told as the story of cities—from those of Mesopotamia through ancient India, China, Greece and Rome, medieval and modern Europe; and from Europe overseas to other parts of the modern world. In the short-run perspective we may study the culture and cultural role of particular cities in relation to their local hinterlands, of villages and towns.[15] The time span in this case is generally the life span of the particular cities that are studied. Between the long- and short-run perspectives, there is a middle-run perspective delimited by the life-history of the different civilisations within which cities have developed.[16] This is the perspective adopted when we consider the cultural bearings of urbanisation within Chinese civilisation or Indian civilisation or Western civilisation or Mexican civilisation.[17] It is a perspective usually of several hundred years and embraces within its orbit not just an isolated city, but the whole pattern of urbanisation characteristic of a particular civilisation and its cultural epochs.

While these three perspectives are obviously interrelated, research and analysis has to concentrate primarily on one due to various limitations. Empirical, ethnographic, sociological and geographical research on cities begins in the nature of the case with the short-run perspective, but the horizon of such research gets widened as it becomes linked with ideas and hypotheses drawn from the other perspectives. One begins, say, with an empirical study of the origins, morphology, functions and influence of an Indian city.[18] Then one may go on to look at this city as a link in the interaction of two distinct civilisations, and see the problem of urbanisation of India generally as a problem in Westernisation,[19] or the problem of Spanish-Indian acculturation of Mexico after the conquest as a problem of de-urbanisation and re-urbanisation.[20] Finally, the canvas may be further enlarged to show both Eastern and Western cities as variants of a single and continuing cultural and historical process.[21] For our purpose, however, we are obviously restricted to concentrate on the middle-run perspective, i.e., we shall analyse the culture and cultural role of the ancient Indian cities.

Before beginning our analysis of ancient Indian urban culture, it must be pointed out at the very outset that the ancient Indian urbanite did not possess a composite culture to boast of. The ancient urban society had two distinct strata and both of these strata articulated their distinct cultural patterns. The upper section of society composed of the ruling elite, priests, rich merchants and artisans evolved a culture of their own which was essentially a reflection of their wealth as well as leisure. Otherwise how can one explain the emergence of classical Sanskrit literature? Why is it that Kālidāsa and his horde chose only big merchants, princes and high-class courtesans as the main characters of their works? Their literary compositions were completely sustained by the upper class urbanites, and they, in turn, reflected the needs and aspirations of this class thereby lending a class basis to that pattern of urban culture which we call sophisticated and refined. In the field of art, the production of the deluxe NBP ware betrays a somewhat similar class bias. Such instances can be multiplied and they cover almost all the traits of contemporary urban culture. On the other hand were the urban poor, whose only culture seems to be bread-culture. Their engrossment with the problem of carving their livelihood hardly left them any time or leisure to think of finer things of life. Vātsyāyana would have burnt his *Kāmasūtra* if there would have been any chance that even this section of the urban population might learn the sixty-four arts and adhere to the prescriptions given in the book. Their time and leisure could be invested or wasted in terms of their going to the low-class *veiśyā*. Nevertheless, they too had their own distinct culture, a culture which was mass-based and which was mainly the culture of the periodic gatherings, either religious or social.

Another aspect of our discussion, related with the conceptual framework of our approach towards an analysis of urban culture, is the question of time span. For an understanding of this problem we shall briefly refer to our literary sources. The traditional brāhmaṇical attitude as articulated in early scholastic texts reflects a situation which hints at the prevalence of some sort of urban-rural dichotomy in this period. For a portrayal of this situation we may briefly refer to the three distinct categories of brāhmaṇical texts—the *Dharmaśāstra*, the *Arthaśāstra*

and the *Kāmasūtra*. Of these three categories the first, group of literary texts, i.e., the *Dharmaśāstras* and *Dharmasūtras* have a complete rural orientation, and they are unequivocally in favour of the village life, going to the extent of even declaring that it was in the rural surroundings alone that one could lead a pure, clean, honest and peaceful life and pursue one's *dharma*,[22] i.e., one's social duties and obligations, without distraction. It is obvious that the normative prescriptions of these texts represent their specific social background, a background reflecting a rural society having a pastoral-agricultural economy supported by only such rural crafts which were necessary to sustain an agricultural economy.

The *Arthaśāstra* of Kauṭilya and the *Kāmasutra* of Vātsyāyana represent an altogether different tradition and are the earliest extant works of the two respective traditions. The *Arthaśāstra* gives a clear impression that the author was mainly concerned with towns and hardly cared to consider the rural aspects within its scope; evidently, Pāṭaliputra, one of the earliest metropolitan centres of the Mauryan, and later, of Gupta provincial administration, was also in the mind of the compiler. He is very explicit in his chapter on cities and forts where he discusses in detail the layout of towns and cities, city-walls, gates, moats, markets, buildings and roads, and city administration. In contrast, while discussing the rural life he, by and large, seems to be disinterested. He too was a brāhmaṇa, but a different brāhmaṇa altogether for he is all out for the city.

Vātsyāyana in his *Kāmasūtra* outstrips even Kauṭilya. Composed presumably when the Gupta empire was at the peak of its glory and urbanism, the text seems to reflect the sort of sophisticated life as lived in the contemporary north Indian urban centres. It was the period when both external and internal trade were enjoying their la t phase of flourish. The *nāgaraka* of Vātsyāyana is the epitome of the contemporary urban culture, an ideal of a cultured and sophisticated city-dweller who had not only a refined taste and aptitude for all the finer arts but was equally involved and adept in the pleasures of the senses. Vātsyāyana frankly asserts that a town is the ideal place to live in, a life worth living,[23] and precisely a similar way of life is portrayed in some of the works of Bhāsa and Kālidāsa but more so in the Prakrit *Chaturbhāṇī*.[24] The

clear inclination towards city and city-life, at least among a section of the people, has therefore to be located in time from *c.* 300 B.C. to A.D. 500, i.e., for about eight hundred years,[25] if one goes by the evidence of Kauṭilya and Vātsyāyana on the one hand and Sanskrit and Prakrit creative literature on the other. *Indeed, this is the one historical period when ancient* India was really able to evolve an urban culture. This, however, does not imply that we are ignoring the urbanism of the first three hundred years, i.e., *c.* 600-300 B.C.; we are only indicating *that these three hundred years constitute the formative period* of the early historial urban culture and after that period the urban cultural milieu becomes quite comprehensible.

This discussion, however, raises a basic problem connected with the evolution of urban culture. The two distinct categories of our traditional Sanskritic literature seem to talk in almost contradictory languages. N.R. Ray even goes to the extent of saying that "the traditional Hindu-Brāhmaṇical attitude of a rural bias and urban antipathy seems to have asserted itself again and again and eventually gained ascendancy even".[26] Citing reasons for this development Ray argues that because the economy was agrarian and most of the crafts and industries village-based, and even the social organisation derived its authority from the villages, the rural areas had an upper hand. He further advances his argument by contending that even the big and small towns which were centres of administration, of big fairs and trade, did not much concern the people, except perhaps those city-centres which were pilgrim centres as well because of their religious importance,[27] hence the rural bias. Ray, however, seems to confuse the whole issue by erroneously lumping together two different aspects of culture. While talking about the dominance of rural culture he simply ignores the fact that in the ancient Indian societal context, there was a cultural milieu which was distinctly urban, a culture which was quite different from the contemporary rural culture. The manifestations of both the cultures naturally differed. While the urban culture articulated its vitality through the *artha* and *kāma* traditions, the rural milieu was represented by the *dharma* tradition. One will have to keep it in mind that they are lopsided and are biased, hence neither of the two distinct traditions should be completely relied upon to draw a total picture, a

mistake which Ray has committed by his excessive reliance upon *Dharmaśāstra* tradition. We are, however, not denying the importance of *Dharmaśāstras* and *Dharmasūtras* in the ancient Indian social context. But the moot point is that although they were normative in nature, were the urbanites adhering to the norms prescribed by it? The available evidence suggests that they were losing ground in the urban setting and traditional norms were essentially hindrances to the urban society which had to be ignored if the urban society was to exist. That the urban society not only existed but even flourished at times bears out the obsoleteness of these norms in the Indian context. Moreover, Ray's blatant refusal to accept a distinct urban economic pattern is a serious historical error which gives his argument a wrong orientation.

Again, when Ray tries to explain his original thesis of rural cultural domination over that of urban by arguing in terms of a village-based economy and society and the least concern of the masses with the cities, he is lumping together not only rural and urban cultures but also two distinct aspects of culture—nature and content of culture on the one hand, and cultural diffusion on the other. He probably wants to say that the urban culture could not make much impress upon its rural counterpart. But instead of saying this clearly he tries to make it a point to support his original erroneous hypothesis. While no or little impact of urban culture on the rural way of life is one thing, the cultural domination of villages over towns is an altogether different situation. Ray seems to miss this point also.

The rural-urban dichotomy in the traditional Sanskrit sources can be explained in terms of the nature of the two cultures. Whereas rural culture was dominated by a magico-mythical complex, urban culture was basically secular in its manifestations. Rural culture had as its rationale the ethos of *dharma*, i.e., one's adherence to the normative prescriptions, whereas urban culture, to the orthodox eye, was a negation of *dharma*, it was in a sense *adhārmic*, for the urbanites had little regard for the norms prescribed by the brāhmaṇas. This was in itself a sufficient cause to enrage the upholders of tradition, and if viewed from this angle, the *Dharmaśāstras*' distrust for and antipathy towards town life will seem to be self-explanatory. It had hardly anything to do

with Ray's erroneous concept of cultural domination of the villages over towns.

This brings into focus the role of rural culture in the rearing up of an urban way of life. Although the differing brāhmaṇical traditions might give the wrong impression that the two cultures were always in conflict, yet the fact remains that in the urban centres the process of acculturation was going on, a process in which the rural culture was playing a dominant role. Take, for instance, the 6th century B.C. urban centres of India. These urban centres were basically indigenous in origin, almost having a way of life similar to that of the villages, so much so that even the anti-urban normative prescriptions were being adhered to. But this ruralism did not continue for long and attack came from a typically urban socio-religious sect, Buddhism.[28] The urban culture thenceforth was no longer a rural one, it came to represent essentially the city and city-life. The more lasting impact of the rural culture can be noticed, however, in the case of the culture of the urban poor. The labouring class had its roots in the villages and they did not have either the leisure or the mental make-up to comprehend and, in turn, adopt the sophisticated urban culture. This naturally forced them to have a culture, some sort of a mass culture, which was quite similar to that of the rural milieu. This situation is also attested to by Kālidāsa when he does not allow the urban poor together with the ruralite to speak Sanskrit in his plays. The urban art also betrays a somewhat similar situation.[29]

A somewhat similar but, of course, less effective role was played by the foreign immigrants in the making of ancient Indian urban culture. To begin with, Alexander is said to have established a number of cities. Unfortunately, we know nothing about them, but it can be said that Alexander contributed to the growing urban tradition. The Greek influence is obvious from the fact that the urban architecture of the Mauryas had obviously certain similarities with that of Greeks. Moreover, the fact that a sizable Greek population was residing in the north-western part hints at the process of acculturation going on in the urban centres of those areas. The explosion of Pāṭaliputra into a cosmopolitan settlement also betrays at least a limited outside impetus. Similarly the sudden spurt

in the growth of towns in the early centuries of the Christian era, no doubt, had links with the thriving trade in this period, but it certainly had something to do with the coming of foreigners in this period. The Gandhāra school of art was certainly a product of foreign influence. Coming together of various ethnic groups with differing cultural backgrounds in the city helped the latter to evolve a culture which was almost cosmopolitan in character and typically urban in outlook.

The last point relevant in this context is the role of technology in the evolution of ancient Indian urban culture. A comparatively advanced technology breeds a relatively materialistic ideology, a situation which was quite applicable to the ancient Indian urban scene. Take, for example, the nature and growth of Buddhism. Although it is useless to say that it was essentially an urban religion, yet it should be emphasised that the Buddha's main areas of activities both in his pre and post-enlightenment days were generally the urban centres and his important disciples as well as followers came from these areas. Here it must be added that Buddhism was the product of an advanced technology and reflected the norms of an urban society.[30] The point that we are trying to drive at is that while the brāhmaṇical religion which was was essentially rural in origin as well as character was idealistic in nature, Buddhism because of its relatively advanced technological background reflected a system betraying traits of materialism.[31] Whereas the traditional brāhmaṇical religion betrayed an anti-commercial bias,[32] Buddhism as a repository of the urban material culture was definitely in favour of mercantile activities. This becomes obvious when the Buddha say ". . . the wise and moral man shines like a fire on a hill-top, making money like the bee which does not hurt the flower. Such a man makes his pile as an anthill, gradually. The man grown wealthy thus can help his family and firmly binds his friends to himself. He should divide his money in four parts; on one part he should live, with two expand his trade, and the fourth he should save against a rainy day."[33] Thus, the Buddha is not only advising the trader how to spend his earnings, he is also asserting the social role of wealth, a situation which obtains in a materialistic society. Thus, the urban society reflected distinct manifestations of materialism in the cultural life and this was solely the

result of the advanced technology which gave rise to the city itself.

A more forceful manifestation of the spirit of materialism came from Ajita Keśakambalin, a contemporary of the Buddha and a product of the urban society, who was the first to teach complete materialism.[34] An element of materialism is traceable in Indian thought from this time onwards. Religious and philosophical literature, whether brāhmaṇical, Buddhist or Jaina, devotes much space to attacking the evil tenets of Chārvākas or Lokāyatas, as the materialist schools came to be known. Throughout the period of our study these non-conformists are referred to with scorn and disapprobation which sometimes seems to contain an undertone of fear, as though the pious authors thought it really possible that the materialists might shake the foundations of the established order, a situation which suggests that these materialists at times were certainly quite popular and influential.[35] Materialist undercurrent is traceable in some secular literature also, such as the *Arthaśāstra* and the *Kāmasūtra*.

Due to such formative influences, Indian urban culture evolved a sophisticated culture—a culture of the urban elite—with distinct cultural content. Many sociologists have classified the content of culture into two large components, material culture and non-material culture. The concept of material culture is clear enough. But the concept of non-material culture is not quite so clear. except in the sense that it is a residual category, including everything that is not material. "Everything that is not material", however, may include items of several fundamentally different kinds, and this tendency to obscure significant distinctions is a logical weakness of residual categories. We shall therefore adopt a threefold classification of the content of culture. Thinking, doing and having are three of the most fundamental categories in the grammar of any language and they broadly give us the three components of culture—ideas, norms, and things. We thus have the major categories or headings under which we shall try to locate the detailed items that made up this large phenomenon in the ancient Indian urban context.[36]

The begin with,[37] ancient Indian urban centres produced a set of literature which was typically characteristic of its

background. Besides putting the *Arthaśāstra* and *Kāmasūtra* in this category, we can also refer to almost all the creative works of this period in this context. The *Arthaśāstra* is not only in favour of the urban tradition, but it also reflects a typically urban mood; Kauṭilya is astonishingly practical.[38] Similarly the *Kāmasūtra* takes into account the practical aspects of life so much so that it goes to the extent of formulating guidelines which might help an ethusiast to win over the wife of another for purely sexual reasons.[39] Similarly the creative works of this period, the works of Bhāsa, Kālidāsa, Śūdraka, Daṇḍin, etc., are generally concerned with the urban way of life, especially the way of life led by the elite. Although, at times, themes are derived from mythology, there is a total absence of religious moralising, or for that matter any deep religious feeling as such. This essentially reflected the culture of a society, not based on idealism but on materialism. That the Sanskrit literature of this type was highly sophisticated is clear from the limited audience for which they were composed. Take, for instance, Sanskrit poetry; it was written mainly for recitation at court, or for comparatively small circles which had the leisure and aptitude to get well-versed in the rigid canons of the literary convention and could appreciate the verbal ingenuity. Moreover in tune with the philosophy of materialism, Sanskrit literature, on the whole, was optimistic, and the tragic drama, or the story with an unhappy ending, was not looked at with favour.[40] This literature reflected the norms of the elite and in the urban centres where one basic qualification of the elite was wealth, tragedy naturally was not the general rule. Here one more aspect of this literature, which has often been misunderstood and even neglected, must be noted. For instance, in the assessment of Kālidāsa's works the tendency has been to gloss over his frank treatment of the theme of love and even to ignore its salient erotic aspects, in order to contend that his poetry affirms the traditional brāhmanical ideals and the conventional ends of life (*puruṣārtha*).[41] This view asserts that Kālidāsa's works were quite in consonance with traditional literary ideas and conventions, and were only meaningful as idealistic expression and not as the expression of deep human emotion nor for the portrayal of the facts of life.[42] This is obviously a biased interpretation

of his works. These critics fail to appreciate the impact of contemporary cultural milieu on literatuure. Whereas the traditional brāhmanical authors were writing for an essentially non-urban way of life, Kālidāsa was the product of an urban culture, A proper evaluation of Kālidāsa in this context will make him stand out as a poet, who strove to treat love and its varied reactions on nature and man in a manner in which his literary imagination directed him.[43] Had Kālidāsa conformed strictlly to the ends of *dharma* we would have had compositions of a different type, purely conformist and ethically correct, but his genuis and urban background created a class of literature, highly sophisticated in nature and serving the needs of the urban elite. This brings into focus the class character of ancient Indian literature. The pre-industrial professional urban litterateur was a member of the leisure class, which in turn included and was appended (as was the priesthood) to the ruling class. Hence, generally, literature tended to become a a closed preserve of the class in power, private literature not accessible to the common man, a proposition typical of all creative Sanskrit literature so that its partronage may be called (following Thorstein Veblen) a method of conspicuous consumption.[44] The inacessibility of this literature to the common man also explains the detailed amorous descriptions in various compositions of this category.

The urban society is dominated by the spirit of rationalism and this atmosphere finds its manifestation in the development of scientific knowledge. Although Childe's association of astronomy with the beginnings of uban life is not applicable to the Indian context, because it had an ecclesiastical orgin here, yet it made enormous progress during our period. This branch of human culture experienced the greatest impact of immigrant culture. Several Greek words became common In Sanskrit,[45] and other technical terms, not so widely known, are indisputably of Greek origin. Of the five astronomical systems known to Varāhamihira one is called the *Romaka Siddhānta* and another the *Pauliśa Siddhānta*, a title which has reasonably been explained as a recollection of the name of the classical astronomer Paul of Alexandria.[46] Western astronomy brought to India the signs of the zodiac, the seven-day week and several other ideas. With their advanced knowledge of mathematics

Indian astronomers made distinct advances on the knowledge of the Greeks during our period, and passed their lore, with that of mathematics, back to Europe through the Arabs. For purposes of calculation the planetary system was taken as geocentric though Āryabhata in the 5th century A.D. suggested that the earth revolved round the sun and rotated on its axis; this theory was also known to later astronomers, but it never affected astronomical practice, a fact which betrays the deep traditional roots of this branch of science.

Allied with this branch of scientific knowledge was the growth of astrology. Both A.B. Keith[47] and Farrington[48] clearly indicate the rural origins of this practice. It seems that a group of brāhmaṇas came to earn their livelihood through astrology and some of them also came to towns. This might have enlarged the traditional brāhmaṇical authorities, a fact attested to by the castigation and condemnation that this practice instigated from the traditional scriptures. The *Purāṇas* prescribe hell for an astrologer while *Manusmṛti* excludes him from *śrāddha ;* the *Smṛtis* also forbid its practice by ascetics.[49] This was natural because astrological practices were contradicting the very basis of brāhmaṇical philosophy. While the brāhmaṇical philosophy emphasised the theory of *karma* the astrologers bred an altogether different view of life, i.e., *bhāgyavāda* or fatalism. It was only with the beginnings of feudal norms from the Gupta time onwards that this practice could make much headway together with the science of astronomy.[50]

Geometry, however, had a purely religious origin and it developed out of sacerdotal exigencies. The Vedic sacrifices needed altars of specific sizes and shapes, and the art of construction of such altars was known as *Śulba*. It was out of this geometry finally developed in our period. We do not know their precise relationship with urbanisation, but much of the later Vedic literature dealing with elaborate rituals was the product of royal patronage. Mathematics, however, seems to have secular origin and it made rapid growth mainly due to the fact that the Indians had a clear conception of abstract number, as distinct from numerical quantity of objects or spatial extension. While Greek mathematical science was almost mensuration and geometry centred, India transcended these conceptions quite early, and, with the help of a simple notation, devised

rudimentary algebra which allowed more complicated calculations, unlike the Greeks, and led to the study of number for its own sake. The simplified system of writing numerals was devised by an unknown mathematician, but the earliest surviving mathematical texts—the anonymous "Baksālī Manuscript", originally of the 4th century A.D., and the *Āryabhatīya* of Āryabhaṭa presuppose it. Moreover, for π Āryabhaṭa gave the usual modern approximation value of 3.1416, expressed in the form of a fraction $\frac{62832}{20000}$. Āryabhaṭa also composed a host of other works[51] and enriched the scientific tradition of ancient India. Some progress was made in the fields of trigonometry, spherical geometry and calculus and the mathematical implication of zero (*śūnya*) came to be realised.

Ancient Indian ideas of physics were closely linked with religion and theology and differed from sect to sect, a fact clearly illustrated by the different atomic theories current in contemporary India. On the other hand in the case of chemistry, although their matallurgical proficiency is attested to by the Iron Pillar of Mehrauli and Copper Image of the Sultanganj Buddha, yet their knowledge seems to have been basically pragmatic without any counterpart in the highly developed science of metallurgy. Chemistry in ancient India was the handmaid not of technology but of medicine; her chemists had no interest in transmuting base metal into gold, but devoted most of their attention to making medicines, drugs to promote longevity, aphrodisiacs, etc., a fact which might indicate the growth in medical sciences in this period. In this context it can be asserted that the medical sciences had a purely secular origin and they flourished in the areligious atmosphere of the urban centres. The basic text-books of Indian medicine—the compendia of Charaka (1st-2nd centuries A.D.) and Suśruta (*c.* 4th century A.D.) are the products of a fully evolved system and after Suśruta Indian medicine almost stagnated. This was a natural outcome of the contemporary situation.

The only science which was fully secular was the medical science. It took, some time after 6th century B.C., the momentous step of transcending itself from magico-religious therapeutics to rational therapeutics, i.e., in the words of the physicians

themselves, from *daiva-vyāpāśrya bheṣaja* to *yukti-vyāpāśrya bheṣaja*.[52] The basic requirements of secularisation so essential for their doctrine led the physicians to create a typical methodology of their own. Discarding scripture-orientation, they put reliance on direct observation of natural phenomena and on the technique of a rational processing of empirical data. They even go to the extent of asserting that any conclusion thus arrived at should be accepted only after verifying it through practice. Thus are premised the fundamentals of a sound epistemology to Indian thought. But this enraged the traditional brāhmaṇical authorities because these doctors were not only rejecting the magico-religious basis of therapeutics but also breeding a dangerously scientific-secular outlook. Consequently the brāhmaṇical law-givers of our period starting from Āpastamba and Gautama to the *Smṛtikāras* of the Gupta period castigate and condemn them obviously without much harming their branch of knowledge.[53] But the situation started changing towards the end of the Gupta period.

The completely secular science of medicine hardly reflects the true spirit of urbanisation; religion was not a weak force in the urban milieu. In spite of our insistence upon the secular nature of urban society one thing should be readily accepted, i.e., religious ideas were a dominant force in the society and it was not very easy to go against the established brāhmaṇical religion; whether you are religious or irreligious hardly mattered but anti-religious attitude was not to be tolerated by the orthodox. Despite such an attitude the emergence of Jainism and Buddhism in the urban context partly explains our original hypothesis regarding a comparative weak hold of religion over society. The emergence. development, growth and the support that these religions could muster, illustrates that the urban soil too was very fertile for the growth of religious ideas and that the urbanites were quite liberal in their religious outlook, a situation quite distinct from the conservative and orthodox rural milieu.

Urbanisation also undermined the importance of sacrificial cult so dominant in later Vedic brāhmaṇism but it certainly never came to terms with urbanism. In the case of Buddhism, however, things were quite different. It originated in an urban milieu and went on readjusting itself in accordance with the

requirements of its followers. Hence the support of the urban mercantile community necessitated the inclusion of certain ethics in Buddhism which would be amenable to and in conformity with the ethics of this class. Consequently frugality became a virtue as did the investment of a sizable portion of one's income.[51] The *bodhisattva* concept emerged and it was said that merit could be accumulated through generations of births until one himself became the *bodhisattva*. Now merit could also be transferred from one person to another by a pious act, e.g., donating a monastic cell to the Buddhist Order—all of this being in accordance with the best of capitalist ethics, the accumulation and transference of capital, so typical of urban economy. Urbanism was, in fact, mainly responsible for the origin and development of Mahāyāna Buddhism.

Here a typical feature of the religious outlook of our period may be noted. This period is singularly lacking in any instance of religious persecution. Even the much-talked-about brāhmaṇical revivalist Puṣyamitra Śunga, instead of being anti-Buddhist, was himself of builder of *stūpas*. Similarly to portray Aśoka as anti-brāhmaṇical is historically misleading. But the situation changes in the early medieval period and instances of religious persecution are available. For the purposes of wealth, a Hindu ruler of Kashmir (*c.* 11th century A.D.) appointed an officer for the demolition of temples. For Harṣa of Kashmir, despoiling of temple was an organised and institutionalised activity. He was a religious iconoclast and plundered temples withont hesitation.[55] To us it seems that the basically tolerant religious outlook in our period was a product of urbanism, and when in early medieval times this tradition became weak, toleration in the religious field became a far cry.

This brings us to the discussion of the place of superstition in the urban culture. That superstition was a socially important force can be inferred from the *Arthaśāstra*. Kauṭilya, who represented a typical urban mood, did not believe in the efficacy of certain religious practices and made provisions to exploit the credulous beliefs of the people for promoting both the internal and external interests of the state. Several devices were outlined by him to augment the royal treasury. For instance, the king may set up a shrine secretly, or may point-

out an evil omen, and then either for the sake of worshipping the god or for averting the calamity he may appropriate the collections raised on one pretext or the other.[56] Similar provisions in the *Arthaśāstra* are numerous. Patañjali also hints at the prevalence of such practices during this period.[57] Kauṭilya firmly holds that religious formalities should not be a bar to the acquisition of wealth[58] and tries to convince his ruler that religious practices are so many superstitions, of which the latter should take advantage in serving his own interests.[59] Thus, it seems that in the Kauṭilyan state superstition was deliberately exploited by the ruling elite to hoodwink and overawe the masses. These measures were designed not only to deprive the people of their earnings but also to mobilise them for furthering the imperialistic ambitions of the ruler. Kauṭilya, no doubt, regards them as superstition, but since they exerted tremendous hold on the minds of the masses he turned them into an instrument of exploitation. This clearly illustrates the fact that the sophisticated urban culture instead of depending on superstition knew its nature and made it a tool of exploitation. At times, Aśoka took recourse to this method.[60] The concept of *bhakti*, i.e., unflinching loyalty to one's master, and the teachings of *Bhāgavad Gītā* were a step ahead in this direction.[61] These concepts were basically formulated to exploit the masses and to keep them under check, and this too was an instrument of exploitation in the hands of the ruling class.

The normative content of urban culture, however, was not absolute in its applicability in the sense that it hardly affected the rural way of life. These norms were the guiding principles of urban life. At the outset it must be emphasised that the traditional brāhmaṇical normative prescriptions did not find a very congenial atmosphere in the urban centres. This was partly the result of the marked antipathy that these norms betrayed towards urban centres and partly as a consequence of the secular-rational outlook of the urbanites. Take for instance, the brāhmaṇical attitude towards trade, which was an important aspect of the urban economy. They are certainly not very favourably inclined in favour of this profession. The earliest law-books prescribe trade for the vaiśyas but assign them the third place in society. Though

in times of distress even the brāhmaṇas are permitted to trade. it was purely of a limited nature. They could not trade in men, liquids, perfumes, cloth, leather, foodgrains, etc,[62] and the inhabitants of Anga and Magadha were held in contempt because they traded in some of these articles. Apparently the traders who dealt in those commodities, some of which constituted the basic needs of society, were looked down upon. Sea-voyage, a necessary concomitant of riverine trade, is condemned as a sinful practice by Baudhāyana.[63] A similar opposition was also generated against money-lending, another important economic development connected with trade. Āpastamba lays down that the brahmaṇas should not accept food of the person who charges interest and of those who live on the labour of persons held as mortgage, presumably in return for interest on the loan, hardly realising himself that the whole brāhmaṇical elite was living on the labours of the śūdras and at times, of the vaiśyas. The same authority laid down expiation for those brāhmaṇas who went to bed with a non-Āryan woman and approached a person who lends money at interest or drinks liquor. Naturally, the adherence to these normative prescriptions was impossible in an urban context, for it would have completely ruined the economy of the town.

Equally unfavourable was the traditional social ideology towards some of the new institutions which had developed in the urban surroundings. Eating houses, a common trait of town life, were considered undesirable. Āpastamba prohibits the upper classes to take food prepared in shops, although some items are given as exceptions; this on the one hand shows some prejudices against the new shopping class and on the other hand reflects an attempt on the part of these traditionalists to come to terms with realities of a new surrounding. But the instances of the latter type are few and far between. Consequently, their attitude towards prostitutes was no better. Prostitution, an essentially urban institution, was condemned by the brāhmaṇical law-givers, the food offered by a prostitute was forbidden by Baudhāyana, while Gautama[64] simply exhorted the brāhmaṇas not to take such food. Thus the traditional norms were hostile towards both the economic and social institutions of the towns, a fact which made these norms generally obsolete in the urban context.

The urban culture, however, came to acquire new norms in the form of Buddhism, for the Buddhistic normative presumptions were generally in tune with the developments taking place in the urban centres. In contrast to the brāhmaṇical normatives regarding trade, the early Buddhist texts record several sea-voyages with a sense of approval and trade was regarded as a respectable profession. Similarly money-lending was not condemned by the Buddhist texts. The Buddha, in fact, advises the householder to repay his debts and does not admit a debtor to the *Saṅgha*. The Buddhist canons define *samma ājīva* (right livelihood) and *samma kammānta* (right action) by prescribing a number of don'ts,[65] but the list does not include usury. Thus Buddhism extended implicit support and indirect encouragement to usury, an economically necessary institution for contemporary times, which was condemned by the brāhmaṇical law-givers. Similarly the Buddhist texts were not opposed to the emerging social institutions. Eating houses were not condemned and prostitutes were not despised. This is reflected from the Buddha's attitude towards Āmrapāli. Women were admitted to the Order and there was no bar against prostitutes. Thus the Buddhistic norms were quite in conformity with contemporary developments and practices and in the urban context the normative aspects of this religion seemed to be more relevant than those of the traditional brāhmaṇical religion.

This should not be taken as suggesting the total eclipse of brāhmaṇical norms in the urban society. Although new normatives were gaining acceptance, the society still operated within the general framework outlined by the brāhmaṇas. As a result, Buddhism which so assiduously tried to establish the superiority of the kṣatriyas in the social hierarchy,[66] hardly met with much success. Similarly ritual pollution was a very strong force in the society. The situation was one of mutual existence, a situation in which both the brāhmaṇical and Buddhist norms had gained acceptability. Aśoka's *dhamma* was probably an attempt at giving to the society the best of both these norms.

A somewhat similar fusion was also achieved in the domain of artistic creativity, which brings our discussion to the material contents of culture. Basham blatantly remarks that

nearly all the artistic remains of ancient India are of a religious nature in spite of his awareness of the existence of secular art in India.[67] He seems to ignore the architectural remains unearthed from different north Indian sites as well as the purely secular sculpture of the Mauryan period. One thing can, however, be admitted that Indian urban art was both religious and secular in nature. There are certain artistic remains which seem imbued with an intensity of religious feeling rare in the art of the world, but it is the full, active and down-to-the-earth life which is chiefly reflected in the art of our period, at first directly, as at Bharhut, Sanchi and Amravati, and then with a gentle idealism, as at Ajanta. Both these phases betray an intense vitality which remind one rather of this world than the next, and seem to suggest the warm bustle of the Indian city and its spirit.

The earliest architecture of historical period is certainly secular in origin and its first representation is the wall at Rājagṛha. The remnants of palace structure unearthed at Kumrahar and the urban secular structures of the subsequent periods forthcoming from different north Indan sites indicate the continuity of this tradition. This is not to deny the existence of the relatively numerous religious structures discovered at various places. The earliest in this tradition were the *stūpas*. In the period between the Mauryas and Guptas much wealth and energy were spent on Buddhist architecture, and not only new *stūpas* were built in this period but the older ones were greatly enlarged and beautified. Of these three are specially noteworthy—those at Bharhut, Sanchi and Amravati. The traces of the free-standing religious buildings are also generally forthcoming from the urban sites of our period and in certain cases these temples even provided the rationale for their existence. The earlist structure of this type comes from Bairat and can be dated to the 3rd century B.C. The next evidence comes from Taxila and the temple is known as that of Jandiāl. It very poignantly reflects the process of acculturation going on in urban centres; it was a Zoroastrian temple with overriding western influence. The Gupta period, however, marked the climax in this field and surprisingly all the famous temples belong to distinct contemporary urban sites.

The earliest sculpture, like the earlier architecture, was

secular in content. The famous Aśokan columns can be cited in this context together with the *Didarganj Yakṣī.* One curious point in this context is that for more than about fifteen hundred years between the decline of the Indus civilisation to the rise of the Mauryas, the sculptural tradition seems to have been lost and to us it seems that its revival was basically connected with the urban spirit. The post-Mauryan sculpture is, however, predominantly religious in nature and mainly Buddhistic in content. The most representative sculpture of this period comes in the form of carvings on the rails and gateways of the great Buddhist sites at Bharhut, Gaya and Sanchi.[68] These centres, out of deep veneration for the Buddha and the initial anti-image worship bias of Buddhism, did not produce Buddha images. It was only at the Gandhāra and Mathurā schools, both of which flourished under the Kuṣāṇa kings and betray explicit foreign elements, that the Buddha came to be represented in sculpture for the first time. It was a direct result of the Mahāyāna Buddhism which, in turn, was essentially the product of urban ideas and practices. These trends reached their fulfilment under the Guptas and the best specimen of this period, one of the Sārnāth Buddhas, essentially represents a bliss[69] which was the ideal of the *nāgaraka.*

Terracottas, an important content of urban art, were completely urban in origin, and their development and decline synchronises with the growth and decay of urban centres in northern India of our period. After a long period of decay the art of terracotta once again appeared in *c.* 600 B.C., became quantitatively numerous from 200 B.C. to A.D. 300, when urbanisation was at its peak, and became less popular in the post-Gupta period when urbanism was generally on the wane. The pre-Mauryan terracottas are forthcoming from Vaiśālī.[70] Buxar,[71] Pāṭaliputra,[72] Champā,[73] Sonpur and Chirand,[74] all in Bihar, and besides two human figurines from Buxar, almost all of them are stylised *nāga* figurines. The situation however changes in the Mauryan period and purely secular terracottas are forthcoming from this period. Foreign influence is reflected in the terracottas of Bulandibagh (Patna) "with definitely Hellenistic heads and faces, Hellenistic modelling and, in a few cases, also Hellenistic drapery."[75] The figurines of dancing girls and graceful ladies, forthcoming from the Mauryan capital breathe an

air of urban sophistication with their smooth and sensitive modelling, dynamic dancing movements, and rich, probably starched, drapery. They reflect the tastes and interests of the urban elite, and were most probably produced by *rājakumbhakārā* of *Aṣṭādhyāyī*. But the Mathurā figurines of the same period reflect a totally religious spirit, devoid of Patna type of drapery.[76] Similar figurines are also forthcoming from various other contemporary north Indian sites generally situated outside Magadha. Animal figurines also formed a popular motif of terracotta-makers and they were probably used as toys.

The terracotta production, however, received an unprecedented stimulus in the post-Mauryan period. Numerous centres between Bengal and the Punjab came into prominence. This was a result of the demands of the market mainly because of the economic prosperity attained by the urbanites as a consequence of the growth in trade and industry. Religious themes came to be represented in a large number of terracotta plaques, but their treatment is influenced by urban sophistication. Almost all the excavated sites have yielded female figurines associated with the Mother Goddess and vegetation cults but the goddesses are decorative female figurines in urbanised garbs. The terracottas also indicate the influence of the new peoples who had come to India in this period.[77]

In the Gupta period the terracotta art reached the highest technical perfection and refinement. Two distinct types of terracottas are forthcoming from this period—one consisting of the moulded and modelled figurines and small plaques used by individuals for household decorations or religious purposes, and the second consisting of the large-sized figures and plaques used for decorating temples and monasteries. While the first group catered to the tastes of the *nāgaraka*, the second group is reflective of the newly emerging feudal class which patronised the brāhmaṇical temples with whom the second group of terracottas were associated.[78] With the decay of urban centres in the post-Gupta phase, terracotta art also started decaying.

A survey of the sophisticated cultural life will remain incomplete without a description of the daily life of a *nāgaraka*, so penetratingly described by Vātsyāyana in his *Kāmasūtra*, a sort of normative guide for the activities connected with *kāma*. After a man has acquired learning, we are told, he should start

his life as a householder with whatever money he is fit to earn: either through the acceptance of alms and gifts (as a brāhmaṇa may do), or through conquests (as a kṣatriya may do), or through the sale of merchandise (as a vaiśya may do) or through serving these three classes of men (as a śūdra may do).[79] Only after gaining wealth should he assume the duties of an educated and cultivated gentleman.[80] He should take up his abode in a capital city of 800 villages, or in a provincial capital, or even in a smaller town dominating either 400 or 200 villages and his residence should be situated in the vicinity of cultural and refined people.[81] There he should construct his house with two blocks (one for bedroom and the other for cooking, etc.), amidst sylvan surroundings and where water is readily available. The outer block should house the bedroom where a cot should be placed supporting a soft bed with two pillows on either side and covered with clean bed linen. There should be another cot nearby (to sleep after the congress). The room should also have a divan at the head of which perfumes, unguents, flowers and pots of collyrium should be kept on a little table. On the floor nearby should be placed a cuspidor, to receive the red expectoration caused by betel chewing, and a chest for clothes and ornaments. Along the wall, on separate ivory pegs, should hang a *vīṇā* (lute), materials for painting and sketching, a book (which the *nāgaraka* is reading currently) and the garlands of the amaranth flowers.[82] Not too distant along the ground, a circular rug with a cushion should be placed and nearby should be two boards, one specifically reserved for the dice game. Birds domesticated for sport should be in cages hanging outside the room to avoid foul smell. A separate quarter should be kept for the making of artificial aids for congress, out of sight of other people. Attached to the house should be a garden containing swings, an arbour of climbing plants, and a grass bank on which the master of the house might sit in the shade with his guests.

Rising in the morning, the *nāgaraka* washes, cleans his teeth, applies cool sandalwood paste while performing the morning worship, burns incense, decorates himself with flowers and garlands, anoints his body with unguents and perfumes, puts collyrium in his eyes, dyes his lip with red lac, and looks at himself in the mirror. Then he chews a betel-leaf and other ingredients

to sweeten his teeth, and then attends to his daily work. He takes bath daily, rubs his body with oil on alternate days, applies *phenaka*, a foam-producing and cleansing substance, to his body every third day, shaves his face every fourth day, and his whole body every fifth or tenth day. Throughout the day, he wipes off perspiration from the armpits in case they are covered. He eats three meals daily and much of his time is spent in charming, graceful idleness.[83] After the forenoon meal he passes his time in teaching and listening to domesticated birds such as parrots, mynas, etc.; in watching fights between quails, cocks and rams; and in the company of the *pīṭhamarda, viṭa* and *vidūṣaka*[84] where he should enjoy himself with repartees and witticisms. Finally, he should enjoy a siesta. Later during the afternoon, the *nāgaraka* having donned his proper garments, goes out to converse with his friends. In the evening he listens to music,[85] And afterwards, he and his friends await the arrival of the ladies[86] in a room in his own house which isfilled with the fragrance of burning incense. Either he sends lady-messengers to fetch the ladies or goes himself to fetch them.[87] When the ladies arrive, the *nāgaraka* and his friends welcome them and entertain them with pleasant and agreeable anecdotes. If the ladies had come from a distant place and their make-up smudged by the rain, the *nāgaraka* himself attends to it.[88]

He had many intellectual and artistic pleasures however. He was not only a man who enjoyed a sophisticated and luxurious life, he was also interested in different arts. This interest was confined not merely to extending patronage and passively enjoying and admiring the arts, but he was himself a creative artist. He was supposed to know the sixty-four arts. He might have been a poet in his own right, which is probably attested to by the fact that some of the surviving Sanskrit poetry is not the work of professionals. Large gatherings held under the patronage of the king or wealthy men for the recitation of poetry were quite common. Smaller groups also met quite often for the same purpose (*goṣṭhī*) either at the house of one of the *nāgaraka* members of the group or at the house of a courtesan. These literary congregations are mentioned as among the chief pleasures of the sophisticated urban dweller.[89] The members of such circles formed regular social clubs and even stood together in time of trouble as in prosperity, and hospitably entertained

new-comers to this group. Sometimes these literary parties were held in the open air, in the gardens and groves about the town, and might be diversified with cock-fighting and bathing. The educated man might also be a painter; his sanctum contained a painting-board or easel, and the *Kāmasūtra* even provides that he should have a special room for sculpture, wood-carving and clay-modelling.

The *Kāmasūtra* also suggests that every fortnight or every month, an assembly of citizens must be convened on a certain auspicious day in the temple of goddess Saraswati. The accredited temple actors from far and near must be present on the occasion, and they should give a performance on the first day for the benefit of the citizens. On the second day of the festival, the actors should be rewarded by the temple authorities and even by the individual citizens, in the latter case voluntarily. The citizens should fully cooperate with the temple authorities for this purpose and in case of emergency the members of the audience should also appear on stage as guest-artists.[90] Such functions strongly suggest an important place of music and drama in the urban cultural life.

A typical festival which illustrates the urban social outlook was the Festival of Spring,[91] in honour of Kāma, the love-god, who seems to be a popular deity. At this festival even respectable and sophisticated citizens forgot their status restrictions, and paraded the streets scattering red powder over their neighbours, squirting them with coloured water and playing all kinds of practical jokes on them. This festival, together with depicting an interesting facet of urban cultural life, illustrates the liberality of the urbanite.

The picture that emerges from this study of the life and pastimes of the *nāgaraka* is an illustrative analysis of the urban cultural situation. That drama, music, dance and prostitutes were integral aspects of the urban life is almost clear. Emphasis on artistic gatherings is obvious and literary activities were intense. The sophisticated group of urbanites were enjoying a full and refined cultural life.

This discussion will, however, remain incomplete without any reference to some of the typical characteristics of this sophisticated urban culture. To begin with, urban culture was rational in outlook and reason seems to dominate the life of the

upper class urbanites. In the field of ideas, urban literature seems to betray a down-to-earth approach. Whether it is the work of Kālidāsa or Kauṭilya, Vātsyāyana or Bhāsa, realism seems to dominate and dogmatism seems to get lost. The case of medical science seems to be a pertinent example in this context. The very fact that this branch of knowledge continued to thrive throughout our period despite concerted orthodox opposition is an ample testimony to the rationalist outlook of the early urban dwellers. Vātsyāyana's *Kāmasūtra* too is a rationalist approach towards sexual life. Like a realist he never divorces sexual life from the religious and perfectly blends the two important aspects of human endeavour. Only a rationalist, and that too in a rationalist atmosphere, would have dared to treat sex so frankly for the consumption of the people. The spirit of enquiry which pervaded the contemporary atmosphere is very well reflected by the emergence of not only Buddhism and Jainism but also a host of other philosophical schools and religious sects, like the Ājīvikas, Chārvākas, etc ; and all these developments were taking place when urban centres had already appeared on the Indian scene. Take the normative aspects of this culture. In a dogmatic milieu dominated by orthodox tradition the existence and continuation of the urban tradition would have been impossible. The brāhmaṇical normatives betray a marked antipathy and, at times, violently anti-urban bias. But the rationalist spirit of the towns probably rejected these normatives and instead went in for new norms in the garb of Buddhism, a step which was certainly revolutionary in spirit and anti-dogmatic in content. This rationalism, the refusal to carry out the dogmatics, can also be discerned from the material contents of their culture. Take the case of arts; the Indian artists, no doubt, continued their own tradition, but unhesitatingly took to newer forms also. The schools of Sanchi, Mathurā, etc., were the well-known illustrations of this tendency. In the field of art too, therefore, the artist did not keep himself engaged in activities prescribed by the *śāstras*, rather he was always anxious to learn new things.

This rationalism of the ancient Indian urban culture had partially resulted from its secular nature. One distinct feature of ancient Indian urban life was the absence of the complete domination of any religion over the citizens. From the very

beginning of urban development in the early historic period the urban life freed itself from the religious dogmatism of the brāhmaṇical system. The spirit of revolt generated by the heterodox sects of the sixth century B.C. was sustained throughout our period and this spirit enabled the urbanites to keep themselves quite unconcerned with the orthodoxies of the established religion. In marked contrast with the rural way of life, the urban culture is dominated by a spirit of secularism. Take literature, for instance. The beginnings of secular literature in our period is essentially an urban tradition. Whether it was Kauṭilya or Kālidāsa he was a typical product of the urban milieu and their writings were a reflection of the urban mentality. Kauṭilya was not only secular in approach but at times he even seems to forget that he was operating within a brāhmaṇical framework. In the *Arthaśāstra* there seems to be some indication of the state control of even brāhmaṇical institutions.[92] Kauṭilya provides for a superintendent of temples (*devatādhyakṣa*) and it seems that the property of the temple was intended to be used by the state.[93] Patañjali's suggestion that the Mauryas even sold the images of gods[94] is quite in consonance with these provisions of Kauṭilya. Further evidence of the non-religious character of Kautilya is found in his emphasis on the unquestioned loyalty of the officials to the head of the state, not to religious practices. Thus, he enjoins that only those *amātyas* who prove themselves above religious allurement should be appointed to the post of judges.[95] Similar instances can be multiplied[96] to indicate the secularism of urban culture. The art and norms of this culture also reflect the same situation, although in a limited sense. The earliest structures, sculptures and terracotta figurines too were basically secular in nature. Even the Greco-Roman influence contributed something to this process. As far as medical science was concerned, its very basis was secularism and rejection of the magico-ritual aberrations. Similarly mathematics had a purely secular origin, and dance, drama, music and prostitution—the important components of urban culture, had very little to do with religion. The lack of the hold of brāhmaṇical normatives over the society can be gauged from the fact that even the śūdras were allowed to enter the urban elite group, as is clear from the *Kāmasūtra*,[97] which is the best narrative of urban life

of our period.

Another typical feature of the urban way of life in this period was the growth of individualism. The growth of cities was the primary factor for this development. The new economy with its emphasis on specialisation was certainly an economy different from the rural type in the sense that in the urban areas individualism in economic life marked the beginnings of urbanisation. In this context a passage from Wirth is quite explanatory : "The superficiality, the anonymity, and the transitory character of urban social relations make intelligible also the sophistication and rationality generally ascribed to city dwellers. Our acquaintances tend to stand in a relationship of utility to us in the sense that the role which each one plays in our life is overwhelmingly regarded as a means for the achievement of our own ends. Whereas the individual gains, on the one hand, a certain degree of emancipation or freedom from the personal and emotional controls of intimate groups, he loses, on the other hand, the spontaneous self-expression, the morale, and the sense of participation that comes with living in an integrated society. This constitutes essentially the *state of anomie, or the social void, to which Durkheim alludes* in attempting to account for the various forms of social disorganization in technological society."[98] This agrees with what is known of urban society in ancient India. Besides its rationality and sophistication, there was also at that time a considerable degree of what Durkheim called *anomie*, or moral and social dislocation, mainly because of the transition from the familiar rural pattern to the new urban milieu. This transition was accompanied by a psychological *malaise*, a heightened sense of dissatisfaction with life as it had to be lived.[99] Erich Fromm too has drawn attention to the association between the developing sense of individuality in man and a sense of growing aloneness.[100] There are thus good reasons for saying that the development of urban life was responsible for the growth of an awareness of individuality and the sense of personal isolation which accompanies such awareness. The manifestation of this awareness can be noticed in the cultural milieu of our own urban centres. The works of art, as brilliant they are, reflect so intense an individuality of the artist. The Sārnāth Buddha is not the creation of the whole community,

it is a reflection of individual genius. Similarly our literature loses the community sense and is increasingly individualistic. The *nāgaraka* is an individual in his own right, he is not one of the horde. The city culture is a clear indication of the decay of the community sense, the sense of "We", and marks the beginnings of a distinct individualistic way of life, the life of "I".

This brings us to yet another characteristic of urban culture, to the very basis of its emergence—the availability of leisure. That the urban culture was sophisticated is an indication of the necessity of leisure both for its creators and sustainers. It was not the culture of the folk which was a down-to-earth thing, hardly needing any training for the folk either to build it up or to enjoy and maintain it. Take, for instance, the litterateurs of our period. A Kālidāsa would have been an impossible proposition had he to engage himself in basic production. The urban situation was such that the upper class could patronise a group of persons constantly engaged in works of literature, art and science. While the first two groups entertained them in return and gave them culturally a distinct identity, the third group cared for their mental and physical health.[101] Moreover, the nature of sophistication reached in the fields of dance, music and literature necessitated a thorough knowledge of the various aspects of these arts for their proper understanding and enjoyment. This, in turn, meant the persons whom this culture represented should themselves have an idea of these arts which would have been possible only if these people could manage enough leisure. Being the organisers of production and exploiters of producers these people came to appropriate both wealth and leisure necessary for the growth and maintenance of such a sophisticated culture.

The class character of this culture becomes obvious from this discussion. That this sophisticated culture was based on leisure is in itself illustrative of the fact that the classes which could not manage leisure were outside the mainstream of this refined way of life. This fact is also borne out by the literature of this period. When Kālidāsa puts Prakrit in the mouth of a certain obviously lower class urbanite in course of his narrative, he is explicitly hinting at the fact that in the urban

society there were persons who were outside the pale of Sanskritic culture; these were the persons who were uneducated so that they could not converse in Sanskrit. Similarly, when Vātsyāyana says, in the last *sūtra* of his chapter on the daily life of the *nāgaraka*, that a wise man should avoid gatherings disliked by the public, which are not governed by any rules, and which malign others,[102] he has certainly in mind the currency of such gatherings—obviously the gatherings of the lower class people—which were viewed with contempt by the sophisticated urban dwellers.

Thus, on the basis of dependable evidences, it can be suggested that in the towns, besides the sophisticated culture of the upper class citizens, another distinct type of culture which was less sophisticated, somewhat crude and essentially representative of the masses, also co-existed with its higher type. What exactly were the nature and contents of this culture ? As can be expected from the contemporary upper class-oriented literature, these hardly refer to the cultural milieu of the lower class urbanite. But certain incidental references to them in these texts are quite illuminating for our purpose. To begin with, the *Arthaśāstra* makes pointed reference to the religious beliefs of this section of the urban community. Kauṭilya devotes his attention to the exploitation of superstitious beliefs of the people [103] He expounds the deliberate use of superstition to hoodwink and overawe the masses into allegiance to the state. The several ingenious methods proposed by him for this purpose[104] clearly included the townspeople within the scope of this scheme. Naturally this implies the existence of such beliefs among the low class urbanites, for the upper section was itself an ally of the ruler and they were well aware of the nature of such practices. In fact, the way in which Kauṭilya makes these prescriptions indicates his awareness of and disbelief in such practices, but since they exerted tremendous influence on the minds of the masses he has exploited them. The common mass of the urban community was uneducated and poor, hence if religion for them had become a set of superstitions, it is not surprising. A somewhat similar conclusion can also be drawn from the prevalence of the cult of *bhakti* and the appearance of the *Gītā*. As a consequence of their poverty and lack of education, hardly any text or artistic creation is

forthcoming which can represent their cultural ethos. Probably they too, like the rural population, contributed their mite to the folk art and folk literature but it is difficult to differentiate precisely their contribution from that of the villagers.

That this section of the urban community had its own cultural gatherings can be inferred from the *Kāmasūtra*. That these gatherings too were looked at with contempt by the urban elite is clear. Although the text is not very explicit on the nature of these gatherings, yet on the basis of Kauṭilya's views about the prevalence of superstition among this section of the urban community, it can be presumed that some of these gatherings must have been religious in nature. Another component of their socio-cultural life was the *gaṇikā*. It seems that those *gaṇikās* who were not proficient in different arts were a part of the cultural heritage of the low class urban community. A few of the Buddhist texts refer to the common prostitute, the *vesī*, but our sources in general are conspicuously silent on this point. This does not mean the absence of this category of prostitutes in the society, it rather illustrates the class bias of our sources which were preoccupied with things that suited the tastes of the urban elite.[105]

The picture of mass culture of the urban centres that emerges from this discussion makes it clear that it was something very different from the elitist culture. This culture was typically superstitious and hardly secular in outlook; the main cultural centres, like periodical fairs or festive gatherings, were basically religious in nature. Similarly individualism had no place in this mass culture. This culture was dominated by the spirit of the community, the spirit of the communal gatherings which bred and sustained this culture. As is the case with almost all the uneducated societies, this community manifested a basically orthodox and dogmatic culture, marked by a distinct impact of ruralism. N.R. Ray's hypothesis of the rural domination over towns[106] seems relevant only in this context. It was here that rural ideas dominated. Hence, it seems that the culture of the urban lower class people was just a simple extension of the pre-urban or contemporary rural societies, of course, in a new surrounding.

Are we to suppose then that the cultural interaction between the town and the countryside was limited to a lower level, that

the 'Great Tradition' evolved in the cities had nothing to do with the culture of the neighbouring villages? This raises the question of the role of cities as centres of cultural innovation and diffusion. Generally it is held that the city rather than the village is the source of cultural innovations, that such innovations diffuse outward from city to country, and that the "spread" is more or less in inverse proportion to the distance from the urban centre.[107] But such a view suffers from certain limitations. It is one thing to say that a metropolis is a centre of cultural innovation and diffusion for its immediate hinterland at a particular time, it is another to ask how that centre itself was formed, over how long a period and from what stimuli. In other words, as the time span is enlarged, the rise and fall of complex distributions of societies are included, the mutual interactions between them and their hinterlands are allowed for, and interactions with other civilisations and their rural-urban patterns are also taken into account, one reaches the inescapable conclusion that the processes of cultural innovation and flow are far too complex to be handled out by any simple mechanical law.

We are not suggesting, however, that the commonly accepted view about the city's role in cultural diffusion is wrong, rather it gives us a general framework to approach our subject; but we think that better results can be achieved if we partially modify this hypothesis. In the primary phase of urbanisation,[108] when cities are developing from folk societies, it seems meaningless to assert that the direction of cultural flow is from city to village. Under these conditions a folk culture is transformed into an urban culture which is a specialisation of it, and if we wish to speak of "direction of flow" it would make more sense to see the process as one of a series of concentrations and nucleations within a common field. With the occurrence of such concentrations, however, the common "Little Tradition" does not become inert; in fact, at times, it may retain a greater vitality and disposition to change than the increasingly getting systematised "Great Tradition" that gets located in special classes and in urban centres. From this angle the spatial and mechanical concepts of direction and rate of flow, etc., will just seem to be metaphors of the processes involved in the formation of a "Great Tradition". The cultural relations between city and

village, therefore, have to be analysed in other terms, preferably in terms of socio-cultural history, for physical space and time may be important obstacles/facilitators to these processes but they are never the fundamental determinants of cultural "motion" as they are of physical motion. Under conditions of secondary urbanisation, the spatial and mechanical concepts become more relevant because people and goods are relatively more mobile. But even then the assumption of a continuous and quantitatively divisible "diffusion" from a fixed urban centre is unrealistic. Thus within these limitations we shall try to analyse the role of city as an agent of cultural diffusion.

In this context, it will be worthwhile to note that during the pattern of primary urbanisation, the urban culture was still in the formative stage. Although a new and typically urban culture was emerging, there were still remnants of a common cultural consciousness. Things were evolving out of the typically indigenous background; urban culture was still a specialisation of the typical rural culture of the neighbouring areas and, in turn, it was probably getting extended to other centres. The secondary urbanisation[109] distinctly made a break with the past in the sense that it finally marked the beginnings of a distinct urban culture, a culture which was hardly religious and sacred. Incidentally this was the period which saw the emergence of an all-India empire as well as the arrival of foreigners in large numbers. And it is from this period that we start getting certain instances of the processes of cultural diffusion from the town to the village.

The most effective diffusion of urban culture occurred in the field of ideas. Buddhism, which had emerged during primary urbanisation, came to be widely diffused during this period. This religion which was typically urban in origin travelled to the countryside mainly during the phase of secondary urbanisation. Beginning with Aśoka it not only got royal patronage, but conscious attempts were also made to propagate it in various areas. The Mahāyāna Buddhism further facilitated this process. Similarly from the city centres, this religion also travelled to foreign lands, and in some cases at least as a precursor of primary urbanisation.[110] This is not to emphasise the urbanising role of Buddhism, we are simply suggesting that urban ideas of India migrated to foreign lands as well.

The role of religious urban centres too cannot be minimised in this context.[111] The sanctity of rivers and the purifying powers of water go all the way back to the *Ṛgveda*, but it was probably the Buddhists who started the practice of holy pilgrimages. According to them, there were four places that the believing man should visit: the Buddha's birth-place, the site where he attained enlightenment, the place where the mad elephant attacked him, and the place where the Buddha died. Aśoka too encouraged this practice by replacing royal pleasure trips by *dhamma yātras*. In the *Mahābhārata*, there is a whole book on the subject of holy places. Even a sinner who is purified by holy water will go to heaven. And the soul ready for *mokṣa* will surely attain it if he dies on a pilgrimage.[112] That a number of urban centres were quite important religiously is too well-known a fact to be elaborated upon. This naturally meant that a good many of the rural folk visited these centres all round the year discovering a new culture here and coming into contact with the same. Such urban centres were also the distributing centres of the urban culture, the "Great Tradition". These centres, therefore, were very important in the city's cultural life.

The city also played an important role in the periodic reorientation of the orthodox caste pattern in ancient India. It was not only the breeding ground for the various "mixed castes" that emerged in our period, but it also weakened the hold of the brāhmaṇical normatives over the society. That the ideas regarding the myth of brāhmaṇical theory of society originated in the city and then were diffused to the countryside can be inferred from our sources. That the śūdras no longer were ready to be doped by *dharma* is clear from a land charter of the middle of the 6th century A.D. which laid down that the grant in question should be protected from the śūdras.[113]

The cultural diffusion from the urban centres also occurred in other fields, like technology, medicine, literature, etc., but they did not alter the folk culture to any great extent, rather the folk culture continued to thrive with vitality throughout our period. The fundamental economic differences between the two areas were mainly responsible for this cultural diachronism. The urban economy characterised by trade and specialised crafts bred a sophisticated culture for the organisers and controllers of these economic activities, while the villages based on a purely

agrarian economy continued to have the pre-urban culture with certain minor periodic variations. The city, which is considered not only the epitome of civilisation but also a civilising agency, restricted its civilising role mainly within the city-walls.

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2. Theodor Waitz, *Introduction to Anthropology*, p. 347. In both the cases, the foreigners preferred to settle in the urban culture.
3. Carl Bucher, *Industrial Evolution*, p. 347.
4. We are using this word both in a material and a non-material sense. As such we shall include within the orbit of culture three aspects of human development —ideas, norms and things. Ideas and norms are both the contents of non-material culture, but we are distinguishing them because they perform different functions in society and operate in different ways.
5. If the *śāstric* injunctions against sea-voyages would have been completely adhered to, Indian cultural penetration into South East Asia would have remained a distant thing. Similarly foreign trade would have been handicapped and the Indian initiative in this field would have simply meant blasphemous leading to social ostracisation of almost all the leading members of ancient Indian mercantile community.
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17. P. Kirchoff, 'Four Hundred Years After : General Discussion of Acculturation, Social Change, and the Historical Provenence of Culture Elements', *Heritage of Conquest*, Sol Tax & Ors. (1952), p. 254.
18. S. Ghosh, 'The Urban Pattern of Calcutta', *Economic Geography*, 1950; D.R. Gadgil, *Poona, A Socio-Economic Survey* (1945).
19. M. Jefferson says, "Urbanization is part of the Europeanization that is spreading throughout the world" (*op, cit.*). Kingsley Davis (*The Population of India and Pakistan*, 1951, pp. 148-49) and M. Zinkin (*Asia and the West*, 1951, Ch. I, 'Eastern Village and Western City') also express almost a similar erroneous view. The total credit for Indian urbanisation in modern times to Western world deliberately ignores the initiative and tradition of urban culture of the Indians. The Western influence only led to the urban "expansion" in India.
20. Kirchoff, *op. cit.*
21. This approach is best reflected in the books and certain articles of V. Gordon Childe.
22. Cf. *Baudhāyana*, II. 3.6.33-34; *Āpastamba*, I, 11.32.21; *Manu*, IV.213.
23. *Kāmasūtra*, 1.4.2.
24. The text contains short plays that reveal the urban life of the Gupta-culture period in the raw.
25. Surprisingly N.R. Ray takes the time-span of ancient Indian urban culture as 500 years—from 1st century A.D. to 5th century A.D. His basis is the *Arthaśāstra*, the *Kāmasūtra* and certain other creative literary works of the Gupta period ('Rural-Urban Dichotomy in Indian Tradition and History', *ABORI*, Diamond Jubilee Volume, 1978, p. 864). He, himself admits that the *Arthaśāstra*, although a later compilation, tends to reflect the ideas and institutions of Mauryan India (ibid.), but while finally working out this time-span, he simply ignores this fact and in the process cuts down the life-span of the urban culture itself.
26. *Op. cit.*, p. 870.
27. *Ibid.*
28. Cf. R.S. Sharma, 'Material Background of the Origin of Buddhism', *Das Kapital Centenary Volume—a Symposium* (eds. Mohit Sen & M.B. Rao, 1968), p. 59ff; also see V.K. Thakur, *The Maha Bodhi*, pp. 37-41.
28. Cf. D. Desai, *op. cit.*
29. W.A. Fairservis, Jr, even asserts that Buddhism was a sure sign of the arrival of urban tradition in the Ganga basin (*The Roots of Ancient India*,

p. 380). He also gives a very suggestive illustration of the process of acculturation going on in the urban milieu on the basis of certain aspects connected with the Buddha and Buddhism. To quote Fairservis, "In its early monuments *there is a strong suggestion that* early civilization which created Buddhism was a hybrid of many traditions. The stupa may be derived from the Central Asian burial mounds perhaps brought to India by the Aryans; the chaitya, or cave temple, harks to an earlier day when microlith-using hunters sought caves for seasonal shelter or ritual; the great pillars of Asoka are strongly suggestive of Achaemenial Persia. One of the most poignant parts of the story of the Buddha is his farewell to his horse—more than a pet, a comrade, a friend—a relationship found among Cossacks, Kazaks, Mongols, a Central Asian trait old indeed by the time of the Buddha's ancestors" (ibid.).

31. Rahul Sankrityayan, 'Buddhist Dialectics', *Buddhism: The Marxist Approach* (1970), p. 8.
32. Cf. S.C. Banerjee, *Dharma-Sūtras* (1962), pp. 158, 182, 185.
33. *Dīgha Nikāya*, III, 188.
34. *Ibid.*, I, 55.
35. For details, see D.P. Chattopadhyaya, *Lokāyata: A Study in Ancient Indian Materialism* (1959).
36. The above discussion gives the following table of cultural components:

CULTURE		
(Thinking) Ideas	(Doing) Norms	(Having) Materials

But some kinds of culture may not fit into only one of these compartments but may belong to rather two or even all three of them. Such combinations of ideas and norms may be referred to as 'ideologies', which would appear in the table as follows:

CULTURE	
Ideas+Norms Ideologies	Materials

Similarly between norms and materials emerge another phenomenon, which can be labelled as 'technologies' and this will give a new look to our table:

CULTURE	
Ideas	Norms+Materials Technologies

But for our purpose we shall stick to the broad generalisations and in order to avoid much categorisation, try to discuss the urban culture within this very framework.

37. We shall not make a comprehensive analysis of the urban culture here. We shall only choose some of the representative examples from each category of cultural contents and, on that basis, we shall try to bring out the fundamentals of that culture.
38. Cf. R.S. Sharma, *Aspects of Political Ideas and Institutions in Ancient India*, pp. 192-200.
39. *Kāmasūtra*, I.5; V.1.

40. A.L. Basham, *op. cit.*, p. 418.
41. A.B. Keith, M. Winternitz and S.K. Das have generally treated Kālidāsa's literary art and thought on the basis that he subscribed to and accepted the prevailing brāhmanical views and ideals in a conventional fashion.
42. Keith is full of praise for Kālidāsa, but laments his lack of interest in "the problems of life and destiny" (*Sanskrit Drama*, p. 160).
43. For a detailed analysis, see J. Tilakasiri, 'Kālidāsa's Poetic Art and Erotic Traits', *ABORI* (Diamond Jubilee Volume, 1978), pp. 365-74.
44. For a detailed analysis of the class character of ancient Sanskrit literature, see D. D. Kosambi & V.V. Gokhale (eds.), *The Subāṣitarantnakoṣa Compiled by Vidākara* (1957), pp. lvii-lviii (the introduction has been written by D.D. Kosambi).
45. A.L. Basham, *op. cit.*, p. 233.
46. *Ibid.*, p. 492.
47. E.J. Rapson (ed.), *The Cambridge History of India*, Vol. I (1955), p. 122.
48. *Encyclopaedia Britannica* (Bicentenary Edition), Vol. II, p. 640.
49. Cf. T.H.D. Sinha, *The Cultural Aspects of Vishṇu Purāṇa* (Doctoral Dissertation), p. 207.
50. Almost all the important astronomers and astrologers flourished from the last quarter of the 5th century A.D. to the 12th century A.D. The following table may clarify this argument:

Name	*Year*
Aryabhaṭa	A.D. 476
Varāhamihira	6th century A.D.
Lāṭdeva & Muniśvara	A.D. 603
Bhāskara I	A.D. 629
Sumati	A.D. 800
Bhaṭṭopāla	A.D. 966
Bhāskara II	A.D. 1158
Mallikārjunasūri	A.D. 1178

51. Recent researches on this topic indicate that Aryabhaṭa probably wrote several books on different branches of knowledge most of which have been lost. At least the following three books can be definitely ascribed to Aryabhaṭa: (i) *Āryabhaṭīya*, (ii) *Āryabhaṭa Siddhānta*, and (iii) *Sūrya-Siddhānta Prakāśa*. Apart from these books, he also wrote some free stanzas (*muktakas*). But his only extant work is the *Āryabhaṭīya*, while only small fragments of the second work have been available; the third work is still untraceable. See P. Jha, 'Aryabhaṭa I: Some of His Lost Works', *JBRS*, Vol. LVIII, pts. 1-4, pp. 188-95; cf. R.K. Chaudhary, 'Hindu Contribution to Mathematics', *Journal of Oriental Thought* (1949), Nasik.
52. This distinction is repeatedly drawn in the *Charaka-saṁhitā*, which also makes it quite clear that rational therapeutics alone represents the technique of Ayurveda.
53. The nature of ancient Indian medical science and the ideological surroundings in which it developed have been very brilliantly analysed for the first

time by D.P. Chattopadhyaya, *Science and Society in Ancient India* (1978).

54. *Dīgha Nikāya*, III, p. 188.
55. R.K. Chaudhary, 'Ancient India : Problems and Possibilities', *Bhagalpur University Journal*, Social Science (1972), Vol. V, no. 3, p. 37.
56. *Arthasāstra*, V. 2.
57. V.S. Agrawala, *India as Known to Pāṇini*, p. 362.
58. *Arthaśāstra*, IX. 4.
59. R.S. Sharma, *op. cit.*, p. 194.
60. Romila Thapar, *Aśoka and the Decline of the Mauryas* (1973), p. 154.
61. Cf. D.D. Kosambi, *Myth and Reality* (1962), pp. 12-36.
62. S.C. Banerjee, *op. cit.*, pp. 158, 182.
63. *Ibid.*, p. 185.
64. *Gautama*, XVII. 17.
65. W. Rahul, *What the Buddha Taught* (1962), p. 47.
66. V.K. Thakur, *Hindutva*, pp. 17-22, 32.
67. A.L. Basham, *op. cit.*, p. 348. A.K. Coomaraswamy tried to read the realism of Vedānta/Buddhism into the artistic remains of our period and interpreted them as expressions of deep religious experience, sermons in stone on the oneness of all things in the Universal Spirit (*History of Indian and Indonesian Art*, 1927, pp. 90-91.)
68. The series Bharhut-Gaya-Sanchi is to some extent confirmed by epigraphic evidence, and we may date Bharhut to *c.* 150 B.C. and Sanchi about the end of the 1st century B.C., with Gaya somewhere between the two (A.L. Basham, *op. cit.*, p. 367).
69. *Ibid.*, p. 372.
70. *IAR, 1961-62*, p. 7.
71. *Ibid.*, *1963-64*, p. 8, pl. V-A.
72. B.P. Sinha & L.A. Narain, *op. cit.*, pp. 10,41; pls. X, XVI.
73. B.P. Sinha, *Purātattva*, no. 6 (1972-73), p. 71, pl. IV.
74. *IAR, 1959-60*, p. 14; *IAR, 1963-64*, p. 8.
75. N.R. Ray, *The Age of Imperial Unity* (eds. R.C. Majumdar & A.D. Pusalkar) p. 533.
76. *IAR, 1954-55*, p. 15, pl. XXVI-A.
77. D. Desai, *op. cit.*, pp. 158-59.
78. For a detailed analysis, see D. Desai, *op. cit.*, pp. 161-63.
79. Here it should be noted that Vātsyāyana's *nāgaraka* is a man free from caste considerations and in this context it should be noted that because of the liberal spirit of the urban centres some of the śūdras too probably came to acquire the sophistication of the urban elite, or to be more precise, some of them entered the elite group also.
80. The implication is very clear. In a culture having clear material basis a poor man cannot adopt the role of a refined and educated gentleman.
81. A situation which makes it obvious that in every city there were at least two cultuarl groups—sophisticated and rustic.
82. These different objects in the room of the *nāgaraka* reflect his sophisticated taste.
83. The day is divided into eight equal parts. The first three are devoted to work; the fourth, to bathing and meals; and the last four stretch through the late

afternoon up to the evening meals.

84. Their association with the *nāgaraka* is illustrative of the presence of a group of people in the town who were, economically speaking, the parasites or the members of the tertiary group.
85. Music was an integal part of the *nāgaraka*-culture.
86. These ladies were the courtesans well-versed in all the sixty-four arts.
87. This reflects the cultured nature of the *nāgaraka*.
88. While giving this description help has been taken from S.C. Upadhyaya's translation of this text (*Kāma Sūtra of Vātsyāyana*, Bombay, 1961, pp. 79-81).
89. *Kāmasūtra*, I.4.
90. *Ibid.*
91. *Ibid.*
92. *Arthaśāstra*, V. 2.
93. R.S. Sharma, *op. cit.*, p. 190.
94. Patañjali on *Pānini*, V. 3.99; cf. V.S. Agrawala, *India as Known to Pānini*, pp. 361-62.
95. R.S. Sharma, *op. cit.*, pp. 189-90.
96. R.S. Sharma asserts that the Kauṭilyan state was not secular. Defining secularism he says that it implies complete elimination of religious influence from the organised policies of the state, which is far from true in the case of Kauṭilya (*op. cit.*, p. 192). But to us it seems that secularism in the ancient context will roughly mean the absence of religious dominance as well as ignoring the religious considerations in matters of state for a complete diversification of religion from politics in the Indian context, whether ancient, medieval or modern, is a misnomer as well as utopian. Even today 'Freedom of Religion Bill' occupies top priority in matters of state; the state has separate departments for certain purely religious activities; new projects are inaugurated by the chanting of Vedic *mantras*. Such instances can be multiplied, yet the modern Indian state boasts of its secularism and intellectuals agree with this proposition which fundamentally seems self-contradictory. If viewed in this tradition Kauṭilya can certainly be regarded as the advocate of a secular tradition. He not only overrides religious considerations to serve the cause of the state, but also provides for exploiting religion (Machiavelli who came after 1700 years or so is regarded as not only secular but anti-religious too for precisely the same attitude) to serve the ends of the state. When applying modern and typically alien concepts in the context of pre-modern societies, one should not only keep in mind the relative applicability of such terms in those contexts, but should also consider the forerunners of such concepts Imported Western concepts should not be imposed on our situation *in toto*, because of the differing traditions, etc., of our own situation from that of the West.
97. *Kāmasūtra*, I.4.
98. *op. cit.*, p. 71 ff.
99. It was this *malaise* which was precisely the starting point of the Buddha's analysis of the

human condition, which he called *dukkha*.

100. *The Fear of Freedom* (1942), p. 23.
101. We are not including astronomy and astrology in this category, because basically the practitioners of these "s iences" were exploiting the people with the help of so many superstitious ideas.
102. *Kāmasūtra*, I.4.
103. U.N. Ghoshal, *Hindu Political Theories* (1923), p. 101.
104. Cf. R.S. Sharma, *op. cit.*, pp. 192-97.
105. Besides some older books including J.J. Mayer's *Sexual Life in Ancient India*, 2nd ed, 1952 (original ed. *Das Weib in altindischen Epos*, 1915), recently two books have been published covering this aspect Indian socio-cultural history (Moti Chandra, *The World of Courtesans*, 1973 and R.N. Saletore, *Sex Life Under Indian Rulers*, 1974). While Moti Chandra's book is completely devoted to a study of prostitutes, Saletore also is very much concerned with them. Still none of them has cared to write even one line about the common prostitutes of this period. Does this reflect their own class bias?
106. *Op. cit.*, p. 870,
107. P. Sorokin & C. Zimmerman, *Principles of Rural-Urban Sociology* (1929), ch. 17; M. Jefferson, 'The Law of the Primate City', *Geographical Review* (1939), pp. 226-32; O.H.K. Spate, 'Factors in the Development of Capital Cities', *Geographical Review* (1942), pp. 622-631; Hiller, 'Extension of Urban Characteristics into Rural Areas' *Rural Sociology*, Vol, 6 (1941).
108. Robert Redfield and Milton Singer have suggested two hypothetical patterns of urbanisation: primary and secondary. In the primary phase a pre-civilised folk society gets transformed into a peasant society and correlated urban centre due to urbanisation. It has been called primary because the peoples making up the pre-civilised folk more or less share a common culture which remains the matrix too for the peasant and urban cultures which develop from it in the course of urbanisation. This development takes place gradually in communities not radically disturbed and it tends to produce a "sacred culture" (in the ancient Indian context, both Redfield and Singer fail to perceive that the newly emerging culture was certainly not sacred) which is gradually transmuted by the *literati* of the cities into a "Great Tradition". Primary urbanisation thus takes place almost entirely within the framework of a core culture that develops, as the local cultures become urbanised and transformed into an indigenous civilisation. In the case of secondary urbanisation a folk society, pre-civilised, peasant, or partly urbanised, is further urbanised by contact with peoples of widely different cultures from that of its own members. This occurs through expansion of a local culture, now partly urbanised, to regions inhabited

by peoples of different cultures, or by the invasion by alien culture groups. This secondary pattern produces not only a new form of urban life in some part in conflict with local folk cultures but also new social types in both town and villages. Cf. 'The Cultural Role of Cities', *Classic Essays on the Culture of Cities* (ed. R. Sennett, 1929), pp. 216-17.

109. In the Indian context the primary urbanisation can be regarded to have begun around 600 B.C. or so while by 300 B C. the stage was definitely set for secondary urbanisation. Because of the Western contact as well as indigenous evolution of urban tradition and coming together of various cultural groups under the imperial sway of the Mauryas, this secondary pattern was arrived at. In a limited sense we might conjecture that Pāṭaliputra, the cosmopolis of the Mauryas, was instrumental for the beginnings of this pattern in the Magadhan area.

110. We have in mind the countries of South East Asia where urbanism roughly synchronises with the arrival of Buddhism.

111. We, however, fail to understand the reasons which have prompted Redfield and Singer to over-emphasise the religious character of the culture-diffusionary role of ancient Indian urban centres (*op. cit.*, pp. 224-27). Probably they are overstressing the scoal'ed religiosity of the Indian civilisation by trying to project that even the dynamics of the Indian urbanism was confined to the field of religion. This viewpoint is a simple extension of the colonial approach to India's past.

112. D. Patil, *Cultural History from Vāyu Purāṇa* (1946), Appendix-B.

113. R.S. Sharma, *Indian Feudalism*, p. 63.

6

Urban Administration

URBANISATION in itself presupposes the existence of a political structure and even Childe accepted the significance of a political authority in the urban context. A political authority could come in picture only when the production of surplus had starsed. It was not the politieal authority which could force the production of a surplus[1] if the climate for the same was not congenial; the only function, and of course an important function for that matter, of that authority was to channel the surplus produced. In fact, it wa only after the realisation that a regular supply of foodstuff from the village to the town was necessary for the survival of the urban dwellers, that political power came to play a vital role in the whole process.[2] The urban political structure was generally manned by the members of the upper class.[3] The political system, moreover, was highly centralised, the provincial and, at times, even local administrators being accountable to the leaders in the societal capital.

The sovereign tended to exercise autocratic powers, although this was mitigated by certain forces basically of urban origin. The king with the societal leaders in general based his authority upon appeals to tradition and to absolutes, the tendency to exploit superstitions for his own purpose not being absent.

V. Gordon Childe also alludes to such a situation when he refers to a struggle for sharing of power in commercial and industrial cities of the Iron Age.[4] Precisely a similar situation seems to have obtained in India also towards the beginning of the Iron Age, as can be evinced from the discovery of iron weapons in a fairly large area from about 900 B.C. onwards from northern India as contrasted with the discovery of very few iron tools belonging to *c.* 800-500 B.C.[5] References to the brāhmaṇa-kṣatriya conflict towards the beginning of urbanisation in early historical India probably echoes a somewhat similar situation.[6] Max Weber,[7] and taking cue from him even A. Ghosh,[8] tries to highlight the Indian caste system *vis-a-vis* non-emergence of an urban community. One of the manifestations of communal eudeavour was the emergence of urban government or municipal government. The urban sanitary arrangements, maintenance of roads, etc., certainly presume the existence of an authority which looked after these aspects of urban life. Much cannot be made out of these evidences but then contemporary literary texts also make specific references to the existence of urban government during our period.

This brings into focus the role of guilds in town administration. The Indian urban dweller remained a member of his caste-group. At the same time a majority of professionals, merchants and secondary producers among them were also members of local professional associations, such as crafts and guilds of urban location. These guilds and other professional associations had competencies with which the officials had to reckon with. The presidents of such local associations often exercised executive and coercive powers over their members and the laws and traditions of these associations were hardly violated even by the king. All their powers, however, involved only special competencies of a particular association in particular matters of concrete group interest. But the emergence of a fuller concept of city autonomy was hampered mainly because of the lack of any joint association representing all the guilds,

etc., of a particular city; even the concept of such a possibility was totally lacking.

From a theoretical perspective it appears that the city was a distinct stage of development in the history of ancient administrative system. It not only led to a sense of community quite distinct from the rural surroundings, but also led to the growth of partially autonomous politico-economic institutions in the form of urban associations, like guilds. The beginnings of a distinctly urban administration was made and the law was not only codified but also uniformalised. Thus, even in the field of local administration, the city seems to be quite advanced from its rural counterpart.

In early historical India too the beginnings of town life marked the emergence of a municipal system. Our sources for this period are generally lacking on this point. The *dhārmic* brāhmaṇical normative literature had a distinct anti-urban bias resulting in almost total indifference towards town life in general. The same cannot be said about the Buddhist literature but on this point these texts too had their own limitations. The *Jātakas* too refer to certain aspects of town administration but their evidence might refer to a later period. On the other hand, the earlier Pāli texts such as the various *Nikāyas* and the *Vinaya Piṭaka* contain very little on this point. In spite of the rise of towns in *c.* 600 B.C., a reliable picture of their administration seems to be a desideratum until we come to the Mauryan period.

It should, however, be noted at this point that in spite of the absence of source materials relating to the political administration of the city, one can infer the existence of the same. From the Kauśāmbī excavation it is evident that there existed a machinery for urban administration. In this context one thing must be noted. We know about the preference of Bimbisāra for village headmen in spite of the fact that numerous towns existed during his time. This might indicate that due to their nascent origins the towns had not yet developed a detailed system of their own administration, hence the silence of our sources about this aspect of town life.

By the Mauryan times the whole spectrum changed. Because of the increasing use of iron in production and the emergence of an all-India empire an altogether new situation emerged. That new situation was fundamentally marked with

the growing economic activities of the state. This coupled with the needs of urban settlements led to the emergence of a machinery for town administration, of which we hear comparatively a lot in Mauryan times. Kauṭilya, who unlike the traditional brāhmaṇical writers displayed a distinct bias in favour of urban ethos, makes a detailed analysis of the various aspects of town administration. His accounts gain credibility through partial corroboration by the accounts of Megasthenes, who took rather detailed notice of the municipal government of Pāṭaliputra.

Kauṭilya envisaged a regular plan of town administration which was specially designed to deal with the typical urban problems and requirements.[9] In his scheme of things the Mayor of the city was called the *nāgaraka*. At times, he is also referred to as *puramukhya*.[10] The *nāgaraka*, as can be expected in the Mauryan scheme of total centralisation, was having neither an independent authority nor autonomous administrative powers in the sphere of civic administration; he was subordinate to the *samāhartā* who was a minister whose portfolio included municipal administration among other subjects.[11] One of these subjects was *durga* which again encompassed various functions and interests among which the interests of cities are mentioned as being looked after by the officer called *nāgaraka*.

The *nāgaraka* had to perform various functions in connection with the day-to-day administration of the city. Kauṭilya, in fact, prescribes specific daily duties for this chief executive officer of the city. Those duties can be recounted as follows :

(a) inspection of the sources of the city's water supply (*udakasthānam*);
(b) inspection of the condition of the roads (*mārga*);
(c) inspection of the city's grounds (*bhūmayaḥ*);
(d) inspection of its subterranean passage (*chhannāpathāḥ*);
(e) inspection of the city's defences such as *vapra* (battlement), *prākāra* (wall), *rakṣā* like *aṭṭālaka* (tower) and *parikhā* (moat).

In addition to these personal duties, he was supposed to keep charge under proper municipal arrangements of things lost (*naṣṭa*) by carelessness or forgetfulness of the owners, and also of cattle that have strayed away.[12]

The *nāgaraka* had under him subordinate officials called *sthānika* and *gopa*. The town was divided into four wards each of which was placed under a *sthānika*, while each *sthānika* had under his control a number of *gopas* who were responsible for ten, twenty or forty households. They as census officers registering the number and names of males and females of each household, their caste, *gotra* and occupations, as also their livestock and income and expenditure. If one keeps in mind the all-pervasive nature of the Mauryan state, this detailed census of the towns becomes self-explanatory. It was not only a safety measure, but also a calculated step to check any loss of revenues to the state exchequer. Here it is worthwhile to note that the two subordinate urban officials, *sthānikas* and *gopas*, have been first mentioned in connection with the rural revenue administration. On the one hand, this might indicate some sort of a link between the census and revenue administration and, on the other, it illustrates a typical adminstrative phenomenon; apparently the rural system of administration was projected on to the urban areas to meet their needs, the *nāgaraka* being the only officer typical of the urban areas.

The *nāgaraka* along with his other subordinate officials was also charged with the maintenance of law and order and with the supervision of sanitation arrangements. Kauṭilya gives a detailed account of the various functions of these officials in this connection together with their welfare activities. The type of centralised state that Kauṭilya envisaged needed protection both from within and outside. Protection from within could be ensured if a proper report on every citizen could be maintained. This maintenance of a proper report was naturally made by Kauṭilya an important aspect of civic administration. While the *sthānika* and *gopa* were charged with preparing such reports about permanent residents of the town, in the case of newcomers and occasional visitors detailed regulations were worked out to achieve this purpose.

Kauṭilya provided for the sending up of reports of all persons who came to or went out of the town by persons concerned. The managers of almshouses or *dharmaśālās* (*dharmāvasthinaḥ*) had to send to the city officer in advance information regarding the arrival to their establishments of all travellers and heretics (like the *Pāśupatas* and *Sākyabhikṣus* as the com-

mentator explains) and obtain permission of the civic authorities for their stay. Surprisingly, Kauṭilya allows them to accommodate, without any prior permission, such ascetics and divines in whom they had confidence. Similarly, artisans and craftsmen were allowed to admit to their place of work (*svakarmasthāneṣu*) only their own relatives. Likewise, although the traders could admit to their shops men of their class, they had to report against those who sold any merchandise at a forbidden place or time or those who presumably possessed any merchandise not their own. Similarly vintners (*śauṇḍikāḥ*), sellers of cooked meat and rice, and women of ill-fame could allow persons well-known to them to stay at their place, but they too had to send reports about persons who were extravagant in their expenditure or who were of dangerous tendencies. All these prescriptions certainly smack of the regulations of ap olice state, a state which maintains a complete control over its citizens so that any disruptive tendency may be nipped in the bud. This coupled with the provision for the institution of espionage must have given the state the powers and means to reduce its citizens to a position of complete subservience to the state.

Not satisfied with these regulations, Kauṭilya also provided for stern punishments in case of defaulters. He made it obligatory for masters of households to make reports of the arrival and departure of their guests; otherwise, they were to be held responsible for crimes committed during the night they accommodated the visitors, and, in case of undisturbed night also, they were to be punished with fines as penalty for evading civic regulations presumably to stop the recurrence of such a lapse on their part. Surgeons treating patients suffering from suspicious wounds and masters of houses finding persons preparing dangerous or deadly drugs were also supposed to report the matter to the concerned civic officials, viz., the *sthāntkas* and *gopas*. Any lapse on this count meant the same quantum of punishment to the erring citizen as to the guilty persons themselves. Kauṭilya chalks out an equally reprehensive set of regulations for suspected characters and fifth column agents. Wayfarers along highways or bypaths, either within or outside the town proper, were assigned the civic responsibility of arresting suspects or undesirable elements frequenting temples and holy places, forests and crematories. To mark out such

persons, they were described as those who suffered from suspicious wounds, or carried harmful objects such as house-breaking tools, or were carrying a load beyond their capacity, or had a suspicious appearance, or were found sleeping untimely (*atisvapnam*) too much fatigued from long journey, or were complete strangers to the country. Such characters were also spied out within the town from deserted houses and factories, liquor shops, restaurants serving cooked rice and meat, gambling houses, and the abode of heretics. Kauṭilya, in fact, seems to take no risk in matters of internal security of the state.

Quite in keeping with the severity of his security regulations, Kauṭilya even bans the movements of the citizens during the night-time. The movements of citizens were forbidden at night when it was 6 *nālikās* before dawn and 6 *nālikās* after sunset. As a *nālikā* was equal to 24 minutes. the period of restriction was from 9 p.m. to 3.30 a.m.[13] A trumpet was blown to announce the commencement and end of curfew and all movements during these hours, especially in the vicinity of the palace, were punished with fines. Inconvenience caused to the public by this restriction was sought to be minimised by granting exemptions in the following cases where free movement was a necessity:

(a) persons attending delivery cases,
(b) medical practitioners,
(c) carriers of dead bodies,
(d) persons moving about with lanterns,
(e) persons going in response to the summons by drum of the city magistrate,
(f) persons going to a theatrical performance passed by the censor (*prekṣānimittaṁ rājānujñātā-nāṭakādiprayogadarśaṇe nimitte*),
(g) persons called out of their houses due to emergencies such as outbreak of fire, and
(h) persons moving with passes.[14]

Movement was, however, made free for festal nights but in that case too persons going about in veil or in inappropriate dress like males in female's dress and *vice-versa*, ascetics and persons carrying *lāṭhī* or other weapons were to be checked and,

if found guilty, to be punished.

The police (*rakṣinaḥ*) were to inform the authorities of any mishap occurring at night, affecting life and property. Strict measures were envisaged to keep the police under check. They were liable to punishment for interfering with the movements of persons entitled to freedom of movement or omitting to interfere where such freedom was not granted. And deliberate harassment of citizens and negligence of assigned duty, like non-arrest of persons to be arrested, were both punishable. Policemen found guilty of criminally assaulting women were severely punished, and in the case of a lady of a respectable family, with the extreme penalty of death. Laxity of control of police over places of indulgence was punished according to the gravity of the occasion.

The city had its jail under its superintendent called *bandhanāgārādhyakṣa*.[15] The jail code seems to be very strict but equally fair at the same time. The jail proper was called *bandhanāgāra* attached to the court of the *pradeṣṭā* and was distinct from the lock-up called *chāraka* attached to the court of *dharmasthīya*. An officer found guilty of letting off a prisoner on considerations of bribe was to be severely punished. Similarly, a man who released from a *chāraka* a charge-sheeted person was to be fined and made to pay the amount of claim against the former. An officer releasing a convict from jail prematurely or improperly could forfeit his whole property and may even suffer the extreme penalty (*vadhaḥ*). Fines imposed for similar other offences were as follows: releasing a prisoner from lock-up without the superintendent's order—24 *paṇas*; exacting unauthorised labour from a prisoner—48 *paṇas*; removing a prisoner and depriving him of food and drink—96 *paṇas*: torturing/extorting a prisoner—heavy fine. Elaborate regulations were also enjoined regarding jail deliveries, etc.[16]

Besides the above-mentioned administrative measures, the civic administration also looked after certain welfare activities connected with the safety of the life and property of the citizens. In view of the widespread use of wooden structures, remnants of which have been discovered at the Maurya levels at Kumrahar (Patna), an important duty of the civic administration was to take precautionary measures against outbreak of fire. It was a period of widespread deforestation resulting in easy

availability of timber and its subsequent use as a building material. Kauṭilya proposes an elaborate scheme to prevent outbreak of fire. Not only special care was to be taken during the second and third quarters of the day in summer, but even cooking was to be done outside the house. Every householder was supposed to keep the following eightfold apparatus for control of fire or to face persecution:

(a) the *kumbha* (a kind of vessel),
(b) the *droṇī* (a trough made of wood for storing water),
(c) a ladder to go on top of the house to extinguish fire,
(d) an axe to cut off beams,
(f) a hook for tearing away burning things,
(g) pincers for pulling out burning straw from thatched roof of houses, and
(h) a leather bag for sprinkling water.

On the public highway, on cross-roads, at the gates of the town, and in all government buildings, rows of vessels filled with water were always kept as safeguard against fire. The discovery of jars kept in lanes at Kauśāmbī lends credibility to this injunction of Kauṭilya.[17] Moreover, thatched houses made of straw were not allowed to be built during the summer within the municipal limits. The masters of thatched houses were not only supposed to stay in-doors at nights, but they also had to run to the scene of fire if they wanted to save themselves from persecution. The shopkeepers were also liable for such fines for a similar offence. Those who caused fire through carelessness had to pay a fine of 54 *paṇas*, but any one found guilty of deliberate incendiarism was burnt to death. To make the town safe from fire, those persons whose occupation was connected with fire, viz, blacksmiths, had to live in a separate locality of the town. Kauṭilya's obsession with prevention of fire leaves little room to doubt their frequent occurrence in those times, a fact attested to by the signs of fire forthcoming from different contemporary sites.

Like regulations regarding prevention of fire, sanitary regulations of the municipality too were enforced with strictness. Throwing dirt or causing mud and water to collect on roads was punished with fines and the fine was doubled in the case of the

royal road thus interfered with. Committing nuisance in places held sacred (*puṇyasthāna*) or temples, reservoirs of water and royal buildings was also punished but exception was made when the same was not done deliberately. Throwing dead bodies of snakes and small animals like cat, dog or mongoose inside the city was punished with a fine of 3 *paṇas*; in case of the carcasses of larger animals like ass, camel, mule or horse, the above fine was doubled, while in the case of human corpse, the fine increased to 50 *paṇas*. Likewise, carrying dead bodies along roads or through gates other than the prescribed ones was a punishable offence, while the guards who connived at that offence were also prosecuted. The cremation of dead bodies in places other than the prescribed ones was similarly punishable.

The planning of the town too, by and large, was regulated by the needs of sanitation. Every house was to be provided with a privy, drain and a well only at the prescribed place, except in the case of temporary pits to serve the place of confinement (*sūtika-kūpa*) or needs of festivities, but these were to be filled up as soon as the emergency was over. There were also fixed regulations for location of :

(i) *chakri-sthāna* or shed for goats and other draught animals,
(ii) *chatuṣpada-sthāna* or accommodation for big animals like elephant,
(iii) *agniṣṭha* or oven.
(iv) *udañjara-sthānam* or a place for keeping big jars for water,
(v) *rochanī* or cornmill, and
(vi) *kuṭṭanī* or mortar.[18]

The main object of these regulations was to reduce to the minimum the inconvenience to neighbours. It was obligatory to leave some space between two neighbouring houses. Each house was to have windows for ventilation. The rules governing house-building could, however, be determined by common consent so as to prevent mutual inconvenience. Such construction of doors and windows facing those of another's house which caused inconvenience to the latter was punished except when houses were separated by the king's road or other highways.

The owner of such houses which caused inconvenience to another house by obstructing its water course and letting the collected water damage its foundations, was to be punished. If it was caused by the accumulation of excreta, the fine was doubled. House-owners were supposed to maintain their drains so as to allow easy passage of water through them. Such elaborate regulations in matters of house construction certainly reflect the municipal authority's concern for a proper and better living within the town.

Keeping in tune with the paternal despotism of the Mauryas, their civic authorities engaged themselves in welfare activities as well. Special measures were adopted during epidemic outbreaks. Physicians were asked to go about the town distributing medicines, while saints and ascetics were kept busy adopting religious remedies. The same measures were also adopted in respect of cattle-plague.[19] In this connection the civic authorities recognised the danger from rats and special measures were taken to destroy them. Cats and mongooses were let loose with penalty to those who would catch them. Poisoned food for rats was widely distributed on behalf on the municipal administration and in cases of virulent outbreak of the plague epidemic, a 'rat-cess' (*mūṣika-kara*) was imposed, requiring the owner of each house to trap a fixed number of rats per day.

There were also detailed rules regulating medical practice within the city-walls. Dangerous diseases were to be invariably reported to the civic authorities and the physicians were fined if the patient died of disease that was not already reported. A surgeon was to lose the limb which he caused a patient to lose by his wrong operation.[20] The towns were also provided with hospitals having sufficient quantities of medicines which could last for years and were replenished by fresh supplies. The state even maintained at its own expense gardens for the cultivation of medicinal plants and herbs.[21]

The municipal regulations were so all-encompassing that even the urban washermen were not left out of its purview. The washermen had fixed places for washing clothes either on wooden planks or stones of smooth surface; washing elsewhere was a punishable offence. Rules were framed to secure honest dealings by washermen. Their personal clothes were marked with a *mudgara* in order to distinguish them from those of the

customers. They were fined if they wore unmarked clothes, or if they sold, mortgaged or let out on hire the clothes of others. The substitution of one's clothes for another's was also punishable. Delay in returning the cloth was also punished. The time allowed for washing corresponded to the degree of whiteness required. While four nights were allowed for best washing showing the utmost whiteness, only a night was allowed for simple washing. Costly clothes which required much skill, care and labour were to be positively returned after seven nights[22] These regulations undoubtedly betray a genuine concern on the part of the civic administration for the welfare and happiness of its citizens.

One of the duties of the civic administration was to protect the public health of its citizens by punishing adulteration of all kinds of food products like grains, oils, salts, scents, medicines, etc.[23] Similarly they sought to protect the city's morals by regulations regarding its public women who were put under the charge of an officer called *gaṇikādhyakṣa*[24] or superintendent of prostitutes. This official controlled their earnings as well as formulated laws regarding their relations with the customers The Mauryan state which tried to tap all possible sources of revenue even taxed the incomes of the prostitutes at the rate of two days' income to be paid per month.

The civic authorities, besides maintaining law and order, collecting revenue and doing certain welfare activities, were also required to provide for institutions for teaching various arts, such as: (a) vocal music, (b) instrumental music, (c) story-telling, (d) dancing, (e) acting, (f) writing, (g) drawing and painting, (h) playing on harp, flute and tabor, (i) thought-reading, (j) manufacturing scents, (k) making garlands, (l) massage, and (m) captivating (the art of the courtesan taught by the teacher, *Dattaka*). This provision might indicate that the civic authorities employed such persons as were proficient in different arts.

The above analysis of the Kautilyan regulations regarding municipal administration certainly demonstrates the genuine concern of the state for its urban citizens. At the same time, these regulations also indicate a phenomenal development in the sphere of urban administration. Here it may be pointed out that Kauṭilya does not give any indication whatsoever of the association of the local and popular elements with town adminis-

tration. Though he pays attention to almost all the basic urban problems, yet he imposes the whole system from above. This policy of absolute centralisation even in matters of local administration was in accordance with the avowed Mauryan policy of complete bureaucratic centralisation. In fact, it would seem that conditions in the cities of Mauryan India approximated to those of a modern police state, with the open supervision of the *gopas* supplemented by a vigorous secret service.

Serious doubts have been raised whether the system advocated by Kauṭilya was ever wholly put into practice. Though much cannot be said on this point with certainty, but then it can be pointed out here that there are certain similarities between the provisions of the *Arthaśāstra* and the accounts of Megasthenes. Megasthenes describes the government of Pāṭaliputra by a committee of thirty members divided into six subcommittees having five members each. The first of his committees was charged with the function of supervision of factories.[25] These factories in the city were the cotton industry, textile industry, working in gold, silver and also other metals, manufacture of arms, building activities, the state mint, and industries connected with dairy products and forest products. Megasthenes records that the factories of the cities were under government 'supervision'. Kauṭilya provides for the regulation of various industries by the state through a number of superintendents. Some of these officials were *sūtrādhyakṣa*, *sauvarṇika*, *lohādhyakṣa*, *lakṣaṇādhyakṣa*, *kupyâdhyakṣa*, etc. All of them were made responsible for the respective departments they controlled. Here a note of caution may be sounded. All these Kauṭilyan *adhykṣas* were probably members of the central government and their description in the context of civic administration probably indicates that Megasthenes had got confused on this point. No doubt, these officers were mainly operating within the city-walls, yet their identification with city administration seems to be unwarranted.

Megasthenes next refers to the second committee of town corporation which looked after the foreigners. The members of the committee even took care of them when they were sick. 'If a foreigner died, he was buried and his property was forwarded to his relatives. They provided lodging to them and, side by side, always kept watch on their activities.' They even accom-

panied them on the way, when they left the country.[26] Megasthenes has taken a special note of the duties of the city administration with reference to its strangers of foreign population, as he himself was a foreigner. This was an age of intense communication with the outside world and, hence, coming of foreigners to the Mauryan cities must have been a common event. Even the villagers who visited cities may have been treated as foreigners. A realist like Kauṭilya certainly visualised such a situation because such strangers, at least some of them, were potential source of danger to the state. Naturally, one of the functions of the Kauṭilyan city administration was to look after the foreigners.

The functions of the third committee of Megasthenes were mainly confined to the registration of births and deaths in the city.[27] This function completely tallies with one of the duties of *sthānikas* and *gopas*, the two subordinate urban officers of Kauṭilya. These officers were charged with the duty of keeping a complete register of city population and prepare regular census, besides a record of vital statistics. These functionaries of both Megasthenes and Kauṭilya had a similar objective in view—to keep the city population under check and to facilitate the work of revenue collection by the state.

According to Megasthenes, the fourth committee of the city corporation was entrusted with "the control of the market" and "inspection of weights and measures".[28] Kauṭilya speaks of an officer called *paṇyādhyakṣa*, who was responsible for the control of the city's market.[29] It was his duty to have control over supply, prices, purchase and sale of commodities. He controlled prices by checking profiteering. He did this by fixing the wholesale and retail prices of various commodities. He made efforts to trace out the deceitful practices of the fraudulent merchants who sold goods at enhanced rates. Such traders were punished with heavy fines and, at times, they had to suffer rigorous imprisonment. He also saw to it that there was no adulteration and defilement in the commodities which were sold in the market. The *surādhyakṣa* performed a somewhat similar function in connection with the sale and purchase of meat and liquor.[30] The inspection of weights and measures was the duty of another officer, *pautavādhyakṣa*. He not only stamped the weights and measures but also checked them periodically, once

every four months, and its cost was met from a special tax of 1 *kākaṇī* per day.

The function of the fifth committee is described by Megasthenes as "the inspection of manufactured goods, provision for their sale with accurate distinction of new and second-hand articles."[31] All these functions were performed by the *paṇyādhyakṣa* of Kauṭilya, who was the controller of prices, of markets for both indigenous and imported products, for imports and exports, etc.[32] As regards Megasthenes' reference to "accurate distinction of new and second-hand articles", it was decided by the *śulkādhyakṣa* of Kauṭilya. This officer could penalise fraudulent understatement of the quantity or price of goods, or showing inferior samples to conceal the true quality of goods in order to avoid taxation.[33]

Megasthenes' sixth committee was charged with the collection of sales-tax.[34] Both he and Kauṭilya refer to an *ad-volorem* tax on sales. The only difference is that while Megasthenes mentions the rate to be tithe, the *Arthaśāstra* mentions a variety of rates ranging from 4 to 20 per cent. The collection of these taxes was the duty of the *śulkādhyakṣa*.[35]

The above comparative study of the provisions of the *Arthaśāstra* and the accounts of Megasthenes demonstrates their agreement on various points.[36] Megasthenes, being a foreigner, could not have grasped the whole thing properly and hence his account betrays some sort of a confusion. But, otherwise, he is very clear about the different aspects of Mauryan civic administration. The care of foreigners, registration of births and deaths, checking of fraudulent practices and maintenance of public health as well as collection of revenues are some of the aspects of civic administration on which both the authorities seem to cross-confirm each other. Here it must be pointed out that the administration of cities might have varied in its minor details from city to city, mainly depending on its size and population.

Aśoka more or less seems to have continued this system of urban administration. The *nagala-viyohālaka mahāmātra* (KRE—I.) of Aśoka seems to be the counterpart of Kauṭilya's *nāgaraka*. Aśoka not only undertook welfare measures like the import of medicinal herbs, roots and fruits (RE—II), but also tried to check judicial torture, and unjust imprisonment and execution

(KRE—I & RE—X). Keeping himself in tune with the Mauryan policy of obtaining complete security for the state, he banned the *samājas* (RE—I) which were centres of nuisance and conspiracy. Aśoka, however, seems to have made an important innovation in the sphere of civic administration; for the first time in Aśokan edicts we come across *mahāmātras* entrusted with the administration of cities. KRE—II refers to the *mahāmātras* in charge of cities like Isila and Samapa. This special status was accorded to these cities probably because they were situated in the newly conquered area and needed more care and dispensation on the part of the king.

The post-Mauryan times, which witnessed the full flowering of urban life in ancient India, fail to give details of town administration as such. The Kaṇva and the Śunga reigns, which get relatively much less space in our sources, fail to identify the different features of urban government. Similarly, we have practically no information about urban administration in the Kuṣāṇa dominions although it witnessed the high water-mark of urban growth. The Indo-Greeks and Scythians, who came to India during this period, have also failed to provide us with any information on this topic. However, on the basis of certain incidental references here and there a rough sketch of town administration during this period can be portrayed.

Our sources for the post-Mauryan period were certainly aware of the existence and working of urban government. An inscription of *c.* A.D. 119-24 explicitly refers to the city corporation.[37] Some of the literary texts belonging to this period have referred to it as *paura*. The *Rāmāyaṇa*[38] and the *Divyavadāna*[39] have used this word in the sense of the assembly in which was vested the municipal administration of the capital. The excavations at Bhīṭā, situated near Allahabad, have revealed to us the ruins of an ancient structure, which was possibly used as the office by the local city council.[40] The excavations have also brought to light certain seals, with which the orders of this council were stamped. On the basis of these evidences we can presume that the city corporations were organised bodies in both the technical and constitutional sense and exercised numerous administrative functions.

Like the Kauṭilyan *nāgaraka* there used to be a chief executive officer in the city administration in post-Mauryan times

also. Manu calls him as *nagara-sarvārtha-chintaka*, i.e., one who cared for all aspects of the city's life. He was a 'mighty and fierce officer of all affairs'.[41] Manu also says that this officer must be elevated in rank, should be formidable and look like a planet among the stars. He must have an army of spies to assist him in "exploring" the behaviour of the people. Manu and Kauṭilya seem to be quite close with each other on this point. Just like Kauṭilya, Manu too does not make the town chief autonomous, rather he places the whole sphere of local government in charge of a minister at headquarters.[42] The *Mahābhārata* also provides that every town should have an officer along with his subordinates. He was expected to be omniscient about his charge. One of his important duties was to keep his superiors informed of all happenings in the area of his town so that the government could know everything about everybody and in times of distress act accordingly. Like Kauṭilya and Manu, the *Mahābhārata* also puts excessive reliance on the role of spies. It has been specifically mentioned that they should be set up in cities.[43] They were to frequent parks and pleasure-gardens, courts, houses and shops, meetings of scholars and gatherings of common people. They were supposed to acquaint the authorities with the day-to-day happenings. Aided with the help of spies, the town administration of the *Mahābhārata* seems to have been devoid of any popular representation.

One of the important duties of the civic administration seems to have been a proper arrangement of the city's sanitation. The cleanliness of roads and proper maintenance of the drainage system were the two main concerns in this context. The person, who either made the road intentionally dirty or deliberately despoiled the drainage system, was subject to rigorous imprisonment and heavy fine. At times the citizens themselves took initiative and the whole community undertook sanitary works under a popular leader. The *Jātakas* refer to such situations. One of the *Jātakas* informs us that residents "used to get up early and sally forth with razors and axes and clubs in their hands. With their clubs, they used to roll out of the way all stones that lay on the four highways and other roads of the town, they cut down the trees that would strike against the axles of chariots, they made smooth rough places, they built causeways, dug water-tanks and built a hall."[44] Both

the literary and archaeological sources attest to the arrangements regarding drainage system in our towns. Naturally such arrangements would have been made by the civic authorities. Remains of various types of drains, including covered drains built of burnt bricks, have been unearthed indicating thereby the civic consciousness of the municipal authorities.

An important function of the municipal government was the maintenance of law and order within the city. Although we do not come across any detailed regulation in this context as is found in the *Arthaśāstra*, it can be presumed from the very nomenclature of Manu's city officer that one of his functions must have been maintenance of law and order. In this context the role of spies is especially noteworthy. No doubt, the main objective of these spies was to check any possible act of sabotage directed against the state, but in the process they must become instrumental in nabbing the anti-social elements as well. Archaeology also tells us that specific measures for the security of the citizens were undertaken. In sub-period VI at Kauśāmbī a number of cross-walls were erected in the lane. Each of these cross-walls was provided with a single leaf door and an open drain. They could be closed at night.[45] The whole system, even from a layman's point of view, betrays an excessive obsession with the security of citizens.

Another important function of the civic body was connected with revenue administration. In the cities the merchants had to pay a number of taxes, such as sales-tax, octroi and a tax on weights and measures. Manu tells us that the king should realise 1/20 of that which persons having experience of toll-houses and skilled in estimating the value of all kinds of goods may fix as the value for each commodity.[46] The question whether this duty was assessed on the value of the commodity or on the profits derived therefrom has been a matter of controversy among the commentators. While Medhatithi and Sarvajñanārāyana interpret the passage under discussion as referring to 1/20 of the amount of merchandise, Kullūka, Govindarāja and Rāghavānanda take the passage to mean 1/20 of the profit derived from the same. Mitramiśra tries to clarify the whole issue by arguing that although Manu refers to 1/20 of the value of merchandise, it should be interpreted to refer to 1/20 of the

excess on the principal; for if the king were to take 1/20 of the principal, the merchant would be ruined.[47] The apprehension that assessment on the principal may ruin the traders is disproved by a rule of Manu which asks the king to fix the market rates of articles after considering, among other things, the probable profit and outlay.[48] It is, however, surprising that the sources of this period are generally silent about any tax or duty to be charged upon liquors, a source of revenue which had earlier attracted full attention of Kauṭilya. Anyway, it seems that normally the octroi office was situated near the main city-gate. When the merchants came near this office, the tax collectors took down the details regarding their merchandise and it was here itself that the octroi was charged.

Although our sources do not tell us much about the different welfare activities of the municipal authorities, they specifically maintain that one of their important duties was the maintenance of a regular system of water supply to the city. Our sources, in fact, indicate that every city had numerous tanks offering facility of water to the citizens. The city of Indraprastha, according to the *Mahābhārata*, abounded in lakes, which were full of water brimming with lotuses and cranes.[49] The excavation of tanks was treated as a holy and useful work. The available evidences lead us to believe that sometimes the expenses of construction of tanks were borne by the local corporate bodies. Improvements were made if there was any sort of damage to the tank. Excavations carried out at different sites have exposed numerous wells suggesting their prevalence in this period.

Thus, on the basis of even limited evidence, it becomes clear that the civic administration was charged with numerous duties and functions in this period. It was responsible for not only the maintenance of law and order in the town, but also assisted in the collection of revenues. It also took measures to deal with subversive elements by collecting information through the spies. To top it all the city chief was also responsible for undertaking certain welfare measures, like proper maintenance of public sanitation and regular supply of water to the citizens. The citizens themselves had a developed civic sense and they assisted the civic administration in their different spheres of activity.

Town administration seems to have been on quite a firm footing during the Gupta period. From the available evidences

it seems that the towns were generally admidistered by a council, called the *pariṣad*, as for instance in the case of the city of Udanakupa.[50] If the city was also the district headquarters, its administration was probably entrusted to the district magistrate himself who worked in consultation with his district council. The Paharpur copper plate inscription dated A.D. 479 refers to the *adhiṣṭhānādhikaraṇa* as the executive officer of the city municipality, which was presided over by the *puroga*, also called the *purapāla* or *nagora-rakṣaka*.[51] This officer was evidently the Mayor of the city,[52] and was sometimes called so after the name of the city itself. Thus, the Mayor of Daśapura is referred to as *Daśapurapāla*.[53]

Generally, the Mayor was appointed by the Governor of the province in which the municipal town was situated. The Junagarh rock edict of Skandagupta refers to this practice. It mentions that Parṇadatta, the Governor of Surāṣṭra, appointed his son Chakrapālita as the Mayor of the city of Girinagara. According to this inscription, the main duty of the Mayor was protection of the citizens and suppression of vicious and cruel persons.[54] His duties also involved prevention or alleviation of such disasters as famine, flood and plague. Thus, the last record that we have of the Girnar dam tells how it broke and was reconstructed by the local city head, Chakrapālita.[55] He is praised in the inscription commemorating the rebuilding of the dam in terms which are evidently formal panegyric, but certain passages are quite interesting and depict the Mayor as a popular figure on most friendly terms with the citizens. These verses, as have been quoted below, reflect the characteristics of an ideal town administrator of Gupta times:

"He caused distress to no man in the city,
but he chastised the wicked.
Even in this mean age
he did not fail the trust of the people.
He cherished the citizens as his own children
and he put down crime.
He delighted the inhabitants,
with gifts and honours and smiling conversation,
and he increased their love
with informal visits and friendly receptions."[56]

The Mayor had under him the city council which was charged with numerous duties and functions. Its main concern was to provide basic amenities and common facilities to the civic population. It was its duty to see to it that every city was provided with water facilities for drinking purposes, temples for the gods, halls for holding public meetings and other civic functions, and gardens, causeways, etc. It was in keeping with his duties that in A.D. 457-58 Chakrapālita constructed a temple for Viṣṇu on the banks of the Sudarśana lake. From the Gangadhar inscription of Viśvavarmana (A.D. 480), it seems, however, that the municipal authorities as well as the civic population even acted jointly to improve the civic amenities.[57]

It seems that by the Gupta period elected administrative officers came to play a crucial role in the city administration. In this connection we may refer to the Damodarpur copper-plate inscriptions which provide clear indication of the participation of representatives of traders and artisans in the municipal management of the towns. According to this set of inscriptions affairs at the headquarters of the Koṭivarṣa *viṣaya* (district) in Puṇḍravardhanabhukti were not the sole responsibility of the district governor but of the local merchants and traders who were possibly recognised for the purpose by the *uparika*.[58] The inscription refers to the *nagaraśreṣṭhi* Ṛbhupāla, the *sârthavāha* Vasumitra, the *prathamakulika* Varadatta and the *prathamakāyastha* Viprapāla.[59] All these persons served on the district committee at least for four years, for which epigraphic records are available. This certainly is no indication of the length or basis of their tenure, which might have varied. Along with the *ayuktaka* these functionaries counted five. and this mumber was coming into use in both the rural and urban areas.[60] It is clear from this evidence that elements of trade and industry were fairly represented in local administration.

As in the earlier periods, one of the important duties of the civic administration in the Gupta period was the maintenance of law and order. It appears from our sources that the city administration appointed a group of personnel called *nagara-rakṣinas*, who roughly correspond with the modern-day police. The people seem to have breathed a sense of security due to the vigilance maintained by the city police. In appreciation of the efficacy of the night guards, the author of the *Mṛchchhakaṭika*

says that no movement in the city could escape their notice.[61] The testimony of Fahien that the citizens did not use locks in their houses, attests to the efficiency of the city police. Besides the police, the spies also played an important part in the civic administration. They kept a watch on the activities of the citizens and the wickedness of the men of suspicious character. They also made secret enquiries into the character of the members of the corporation and high officers. The *Nītisāra* speeifically mentions that spies should be deputed by the state for keeping vigilance over the secret activities of the citizens,[62] implying thereby the crucial role played by spies in the city administration. Although it was the duty of the civic administration to protect the citizens from dangers, yet the citizens themselves too resorted to corporate activities to counter possible dangers. *Bṛhaspati* informs us of an agreement amongst the citizens for the protection of the city in times of distress. He says that in the case of a danger apprehended from robbers or thieves, common efforts were made to counter it.[63] Such instances betray either the weakness of the civic authority or the developed civic sense of the urbanites.

The municipal government was charged with certain revenue functions also. The most important among such functions was collection of toll from the merchants. The *Mṛchchhakaṭika* informs us that in the main markets, the toll collectors traced out whether the merchants had paid the toll or not at the main city gate.[64] The *Viṣṇusmṛti* tells us that the toll was equivalent to 1/10 of the value of the goods in the case of commodities brought from the countryside. On foreign goods the same duty was decreased to 1/20 of the price of the import.[65] In addition, the municipal authorities were probably required to control the prices of the various commodities and to check adulteration.

An important function of the Gupta civic administration was the regulation of gambling. That gambling was a very popular pastime in the cities of this period is obvious from our literary sources. The *Mṛchchhakaṭika* has described the various aspects of this pastime. It appears from the available records that every city used to have registered gambling houses, the keepers of which were required to pay a tax from their income to the state. The control and proper regulation of these gambling houses were among the various responsibilities of the civic administration.

The above survey of the Gupta civic administration indicates that the state allowed a fair degree of popular representation in the administration of towns. No longer we hear of numerous officials, unlike under the Mauryas, engaged in various functions connected with the town. This development was perfectly in tune with the general developments in the field of Gupta administration. Because of widespread land grants and growth of intermediaries in land the administrative machinery of the Guptas tended to be "feudalised" leading to the emergence of the elements of decentralisation. This nascent tendency affected the administration of cities also, leading to a fair amount of representation of local and popular elements in the city's administration.

Till now, all the time we have been talking about the administration of towns in a monarchical set-up; there were, however, towns in the non-monarchical set-up as well. Evidence of civic government is not directly forthcoming from these areas but then deductions can be made from the available evidences. In the case of the Lichchhavis, each territorial unit was under the control and supervision of a *rājā* who was, in all probability, elected by the citizens of the area. Under him were three important subordinate officials, namely, the *uparājā*, the *senāpati* and the *bhāṇḍāgārika*.[66] The territorial units seem to have enjoyed a great deal of autonomy in matters of local administration. As the *rājā* would have been deeply engaged in the works of the General Assembly, the real burden of local administration might have possibly fallen upon the *uparājā*. The *rājā*, besides acting in a supervisory capacity, also acted as a link between his unit and the *gaṇa*.[67] We do not possess other details which may help us in explaining different aspects of town administration in these areas.

In this connection a brief reference to the Greek towns might prove fruitful. Some time after the beginning of the iron age, the Greeks, who partly lived in towns, changed from tribes to states, and dethroned their kings who had been characteristic for the period of military dictatorship. This revolution was achieved under Solon (594 B.C.). In Athens the archaic popular assembly was revived and some sort of a limited democratic apparatus was put into practice. Precisely the same events were occurring in India too at the time of the Buddha,

but we are not sure whether commercial towns on Athenian pattern existed in India or not. It is possible that some towns in the Punjab, which the Greeks called "independent towns", were similar types of commercial towns along the roads leading from India through the Punjab to Iran. This would mean that they had a completely different type of administrative machinery. Although we have no details of the administration of such towns, it can be presumed that their administrative system in a way tallied with the administration of large tribal oligarchies. The city administration, basically oligarchical in nature, might have carried the business of the town through discussion.

The next point to be discussed in connection with urban administration is the role played by the merchant and craft guilds in this context. Although the guilds emerged with towns, they did not have any meaningful role to play in the early civic administration. While in the pre-Mauryan times they were not yet an organisation powerful enough to have any say in the administrative policies of their place of residence, during the period of the Mauryas the complete bureaucratisation of the administrative apparatus hardly left any scope for them in the civic corporations. The guilds, no doubt, had already evolved their own usages and practices but these were limited to their respective members. Similarly, whatever authority the guilds exercised was over their own members. No doubt, the king tried to protect them and encourage them, but during these early centuries of urban life, they were never allowed to have any say in matters of administration. Till the Mauryan period, the guilds were solely concerned with their economic activities while exercisiug some authority over their members.

The situation, however, changed in the post-Mauryan times. A very important, and rather novel, development in the polity of this period was the emergence of almost autonomous governments in at least a dozen cities of northern India in the second and first centuries B.C. The administration of these cities was evidently in the hands of the guilds. Guilds of traders belonging to these cities issued copper coins, which is ordinarily done by the ruling power, for it is an important insignia of sovereignty. At least in five pre-Indo-Greek coins, the term *nigama* is clearly mentioned; four out of them bear the names of the different

quarters of Taxila.[68] Yet another coin found from Taxila records the term *pañchanigama*.[69] These evidences clearly indicate the almost independent status enjoyed by this city. The discovery of these coins belonging to the period prior to the advent of the Indo-Greeks is also signlficant. It is almost evident that after the break-up of the Mauryan dynasty this area, which was very distant from Magadha, went out of the hands of their successors, like the Śungas and the Kaṇvas. As it was situated on a very important trade-route, the merchant population which must have been quite powerful in their own way, seized the opportunity to establish a government by their own corporation. Thus, it is almost certain that on the eve of Greek occupation of Taxila its government was carried on either by a single corporation of artisans and merchants (*nigama*) or by a joint body comprising five corporations (*pañchanigama*). A somewhat similar practice seems to have prevailed at Kauśāmbī also, for it is known as *nigama* on one of its coins.[70] Coins of guild of the *gandhikas*, literally meaning perfumers but really general merchants, have also been found in the region around Kauśāmbī.[71]

The names of Tripurī, Māhiṣmati, Vidiśā, Eran, Bhagilā Mādhyamikā, Vemaka, Vārāṇasī, etc., have also been noticed on their copper coins, implying the corporate existence of each one of them. Notably all such cities of northern India like Taxila, Kauśāmbī, Varāṇasī, etc., were important trading centres and it was only there that autonomous civic authorities sprang up. This might indicate that the post-Mauryan political unstability helped the merchants to establish their own authority over the city which was not the seat of any royal power. That trade and commerce and the resultant prosperity of the mercantile community was mainly responsible for the emergence of such autonomous city centres is unmistakable. In this connection it may be noted that though the term *nigama* does not occur on coins of cities other than Taxila and Kauśāmbī, yet on the very basis of the issuance of coins in the name of particular cities, it can be presumed that they emerged autonomous entities on the disintegration of the Mauryan empire and before the rise of the Saka and the Kuṣāṇa powers. In fact, at no stage in the early Indian history do we come across any instance of cities or guilds issuing coins as we find them doing in the post-Mauryan nor-

thern and central India. Unfortunately, we do not know about the way they were governed. While in the case of Taxila and Kauśāmbī it is clear that the merchant guilds exercised their authority, in the case of the rest of such cities we do not know even that. It is, however, certain that the second category of cities were also being administered by some corporate body. In this connection it is worth while to conjecture that these cities were being ruled by the merchant guilds together with other local representives, a fact that might explain the absence of the word *nigama* on their coins. About the constitution and functions of these corporate civic authorities we are completely in the dark. It can be presumed that besides maintaining law and order and realising taxes from the citizens, they also engaged themselves in welfare activities. In the absence of an effective central authority, even the protection of the city from external dangers may have become their sole concern.

Such coins representing certain cities are not to be found from the latter half of the 1st century B.C. This possibly indicates that with the establishment of the Sātavāhana and the Kuṣāṇa kingdoms in the first two centuries of the Christian era, these towns lost their autonomous character and, therefore, ceased to issue coins in the name of their respective areas. It will, howevever, be wrong to presume on this basis that these towns became ineffective and unimportant. The available evidences indicate that their civic life did not lose its vigour. That this period was one of prestige and authority for guilds can be inferred even from the evidence forthcoming from the Deccan where the rulers had to reckon with merchant corporations called *nigama sabhā*.[72] In northern India the kings had to give due place to the guilds of artisans in the Kuṣāṇa territory. Clear proof of the participation of merchants in town administration is not available but inscriptions show that they administered donations in towns in north India. Here a pertinent question strikes us : if the merchants were thought competent enough to take care of rich donations made by princes, why could they not be entrusted with the responsibility of urban administration ? Here it may be noted that many merchants proudly mentioned the towns to which they belonged as integral parts of their names. This phenomenon betrays a high degree of civic participation and belonging, possibly born

of their actual involvement in the government of their towns. In the absence of available source material nothing can be said on this point with any degree of certainty, but it can be certainly maintained that the merchants because of their wealth and civic prestige may have come to be associated with the general administration of their respective towns.

In this connection we may take note of the position of guilds during the Kuṣāṇa period to get some idea of their status in the urban set-up. Although literary evidence for the existence of guilds in northeastern India can be inferred from Pāli texts and the *Arthaśāstra*, and more so from the post-Maurya Buddhist texts, we get the earliest epigraphic evidence regarding the same in Kuṣāṇa times. Four seals of the Kuṣāṇa period from Bhīṭā mention the *nigama*,[73] and an inscription speaks of two guilds (*śreṇis*) at Mathurā including one of wheat-flour dealers.[74] The two Mathurā guilds, which received endowments in cash for feeding the brāhmaṇas, were capable not only of managing their own affairs and of taking care of their members, but possibly of managing the affairs of the town as well. Though inscriptions or literary sources do not refer to the existence of such a practice, yet in the light of later developments, especially in Gupta times, it can be assumed that the *nigama* had become quite important in contemporary civic life. Nevertheless, from the above survey it is clearly manifested that in sharp contrast to the highly centralised mechanism of the Mauryan town administration, its post-Mauryan counterpart seems to have been an apparatus hardly imposed from above, and rather having ample scope for the participation of merchants and artisans. It seems that a beginning had already been made towards local self-government.

The Gupta period marks the most flourishing age for guilds in northern India. Numerous seals and inscriptions forthcoming from this area suggest that during this period the guilds of merchants and artisans functioned with much power and prestige in such towns as Vaiśālī, Bhīṭā, Indore and Malwa. The available evidences make it clear that these guilds shared a good deal of responsibility for urban administration. The fact that the urban administration of north India was no longer marked by the existence of towns should not be treated in any way a step towards centralisation and bureaucratisation in the field of

local administration. The lack of this institution was balanced by considerable autonomy enjoyed by organised professional bodies in Gupta times. Whereas the post-Maurya independent towns had issued coins, now only seals were issued to enforce the authority of the corporate bodies. But at the same time it must be taken into consideration that while the independent towns of post-Maurya times hardly left any legacy for the posterity, the Gupta towns marked a definite stage in the evolution of local self-government in ancient India. While the post-Maurya independent towns existed in a vacuum, the Gupta towns left a definite legacy for the posterity in the field of civic administration and popular representation therein.

The civic administration of Vaiśālī, an important town during the Gupta period, can be reconstructed on the basis of available evidences. References are not wanting regarding the existence of separate guilds of artisans and merchants in that town. But the most numerous seals, as many as 274, found there belong to the *nigama* guild of the *śreṣṭhis* (big merchants), *sārthavāhas* (itinerant traders) and *kulikas* (artisans).[75] These seals constitute our most important source for the study of the civic administration of Vaiśālī. The *nigama* has been compared to the modern chamber of commerce,[76] but this certainly is a limited comparison. The inclusion of artisans along with different categories of merchants in the *nigama* gave it a different connotation and made it broader in nature so that it not only carried economic activities, but also the administration of the town. We do not possess detailed information regarding the precise nature, constitution and functions of the *nigama*, but they certainly discharged, besides other functions, the normal functions of a civic body. That it was a high-powered and prestigious body is obvious from the fact that all its members seem to have been the leading personalities from different professions, either elected or hereditary. Similarly, the fact that caste was no bar to admission to the guild can be evinced from the differing titles, viz., *dāsa*, *datta*, *nandin*, *pāla*, *sena*, *siṁha*, etc., of its members. The *nigama* perhaps performed municipal functions in regard to bankers, traders and artisans whom it represented, and also in relation to the employees of various civil and military offices whose headquarters were situated at Vaiśālī. A contemporary law-giver Nārada enjoins

that the *nigama* could frame its own rules known as *samayas*,[77] and that the king was under obligation to maintain the usages settled among them in both open and fortified settlements.[78] This amply demonstrates that *nigamas* of Vaiśālī enjoyed a large measure of autonomy.

In addition to this we hear of separate guilds of artisans, etc., at Bhīṭā[79] and other places. The guild of silk-weavers in Mandasore and that of oil-pressers in Indore (Bulandshahr) are prominently mentioned in the Gupta inscriptions. These guilds were guided by their customs and usages followed by their members without any interference or hindrance from the state. Though the guilds were often mentioned in the pre-Gupta law-books, but the most detailed accounts about their functions and other activities are laid down by the law-givers of the Gupta period.[80] Apparently corporate bodies had now become so prominent as to attract the special attention of the jurists, who asked the king to respect as well as implement the laws and customs of the various guilds. The heads of their respective guilds could naturally invoke the coercive authority of the state if their members did not fall in line. A concrete example of the measure of autonomy that the guilds had come to enjoy by this time is found in the charter of Viṣṇuṣena granted in A.D. 592 in western India. It exempted the traders from various dues, left them free to deal with labourers, herdsmen, etc., and authorised them to impose forced labour on certain artisans.[81] The traders were even allowed immunity from the entry of royal officials in their area and consequently from payment of dues and rations for supporting these officials.[82] Though such charters are not known to northern India, they may not have been altogether absent. From the above discussion it would appear that in Gupta times guilds looked after the affairs of their members as well as of the towns in which they were functioning. The absence in Gupta inscriptions of any officer charged with the specific duty of urban administration evidently indicates that the state had been partly relieved of the burden of administering towns, possibly because this duty was now discharged by the guilds.

Here it is worth while to take note of the institution of "aldermen" which formed the executive of the local groups and corporations. The *Smṛtis* call them *kāryachitakas* and *mahot-*

tamas. According to Bṛhaspati, only such persons are to be elected as members of the executive of the corporation, who were of pure conduct, fully conversant with the *Vedas*, born in cultured families and skilled in every business.[83] The same authority describes their duties as providing financial aid to the deficient, the feeble, the blind, the orphaned and the distressed.[84] The members of the executive also looked after the welfare of the corporation. Yājñavalkya enjoins that the aldermen should be well-versed in religion, honest and free from covetousness; they were to be respected by the members of the corporation.[85] In case of any dispute between the aldermen and the members of the corporation, the king acted as an arbiter.[86] One of the important functions of the aldermen was to secure and maintain public peace (*śāntika-karma*). They were also charged with the duty of ensuring public health (*pauṣṭika-karma*).[87] Bṛhaspati says that they were engaged in useful activities, like the construction of public halls, wells and places where drinking water was available, and rest houses.[88] Yājñavalkya specifically enjoins that profits earned by an alderman in the execution of a public work entrusted to him should be given to the corporation. In case of default he was compelled to pay a heavy fine which was equivalent to eleven times the amount of original profit.[89]

Besides, the projection of this guild officer to the civic corporation, the guilds also played an important part in judicial administration. The Gupta law-books provide for a hierarchy of local courts, which were to be recognised but not established by the king. Bṛhaspati and Yājñavalkya mention three grades of local courts, *kula*, *śreṇī* and *puga*, and the former adds that the appeal shall lie to the higher court in the same order.[90] Kātyāyana, however, makes certain changes by replacing *puga* with *gaṇa* and adds in the same ascending order two other courts, namely, an authorised person and the king.[91] According to the law-books, artisans, traders, etc., can have their own courts empowered to decide on all matters relating to these groups of people. Thus, along with executive and legislative powers, the king, in the Gupta period, also delegated judicial powers to the urban corporate organisations.

The above survey amply demonstrates the increasingly autonomous character of the guilds, as virtually independent units of political power, a fact that can also be inferred from the

rules which governed the relations between the guilds and the state. While the earlier texts ask the king to pay respect to the customs of the guilds,[92] those of the Gupta period specifically instruct the king to enforce the usages prevalent in the guilds.[93] Bṛhaspati enjoins the king to approve whatever the heads of guilds do in accordance with prescribed regulations, for they are declared to be the appointed managers of affairs.[94] He even warns that if the usages of localities, castes and families (*kulas*) are not maintained, the people will get discontented and wealth will suffer thereby.[95] Thus, it seems that the guilds were free to act in whatever way they liked, and the king was bound to accept their decision.[96] It is symptomatic of the declining central authority that the king is required not only to observe the laws of the guilds but also to enforce them.[97] This provides an important clue to the understanding of this unique development during the Gupta period. This period is marked by certain developments which led to feudal formation. Economic retrogression, emergence of self-sufficient units of production and a resultant trend towards decentralisation are the characterstic features of Gupta and post-Gupta times.[98] Interestingly, all the four law-givers viz., Yājñavalkya, Nārada, Bṛhaspati and Kātyāyana, whose works betray the increasing power of guilds, belong to this period. Naturally enough, these law-givers, who certainly kept in view the esisting realities, discussed in detail the various aspects of guild organisations as well as their overriding influence even in executive, legislative and judicial matters. If one keeps this emerging feudal pattern in view nothing will seem surprising in the growth of self-sufficient economic guilds as powerful corporate bodies possessing the status of tribunals, and their gradations as appellate courts, as well as the evolution of the binding character of their laws, in Gupta times. In a society marked by an all-round trend towards decentralisation any organised group with some public standing could easily grab power, and the guilds did precisely the same.

The above discussion brings out certain salient features of urban administration in ancient India. The urban government was charged with three basic duties—maintenance of law and order, collection of revenues and looking after the general welfare of the citizens. These duties were quite in tune with the spirit of ancient system of administration, but there seems to be

a change for the better. The ancient administrations were mainly concerned with the maintenance of law and order and collection of revenues; they rarely needed to justify their system by undertaking works of general welfare. The fact that welfare measures were a part and parcel of the city administration reflects a sense of greater responsibility of the state towards its urban population. This seems to be natural because the cities were the centres of the kingdoms and the city's population was the most conscious of all.

Another important feature of urban administration was the gradual evolution of self-government *vis-a-vis* the bureaucratic control. From a perusal of different aspects of civic administration in ancient India it emerges that the growth of local self-government in urban areas was concomitant with the decline in royal authority and emergence of relatively lesser kingdoms. Thus, during the days of an all-India empire of the Mauryas the popular elements had no say in civic administration, while from post-Maurya times they started asserting themselves. The picture becomes more clear if we keep in mind the emergence of independent city governments between the period following the decline of the Mauryas and the rise of the Śakas and the Kuṣāṇas. Similarly, during the Gupta period, which was marked by the emergence of feudal institutions and the consequent trend towards decentralisation, the urban administration came to be completely dominated by popular elements, especially the guilds. From the complete bureaucratic control of the Mauryas to an almost total domination by popular elements under the Guptas, the urban administration not only passed through many vicissitudes but had finally mutured, paving the way for the emergence of somewhat autonomous urban government in post-Gupta times.

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7

Decline of Urban Centres

THE Gupta and post-Gupta phase marks a period of decline in the ancient Indian urban tradition. It is surprising to note that many prosperous urban settlements of the earlier periods were either decaying or had already disappeared during this period. This development is specifically recorded by Chinese pilgrims, Fa-hsien and Hsuan-Tsang. Even some of the indigenous literary sources, unlike Vātsyāyana's *Kāmasūtra*, hint at such a situation. The archaeological sources are, however, more explicit on this point. The material remains and structural evidence from the excavated sites belonging to the Gupta period unmistakably suggest an overall decline of urban centres during this period.

The testimony of Chinese pilgrims Fa-hsien (A.D. 405-11) and Hsuan-Tsang (A.D. 630-44) is quite important in this context. They generally give an account of the contemporary towns and monasteries and these accounts are generally corro-

borated by the archaeologists' spade. The accounts of the two travellers, however, differ in nature; while Fa-hsien is sketchy and even ambiguous at times, Hsuan-Tsang is quite clear and gives details of most of the settlements he visited. The description of Gandhāra (*Kan-tō-lo*) area given by Hsuan-Tsang clearly brings out the decaying condition of the urban settlements of the area. He says that the capital of Gandhāra, Puruṣapura (*Pu-lu-sha-pu-lo*), was about 40 *li* in circuit, the royal family was extinct and the country was subject to Kapisa. The towns and villages were desolate and there were only a few inhabitants. He notices that at one corner of the royal capital there were about 1000 families.[1] All the Buddhist monasteries in the country, about 1000 in number, were utterly dilapidated and deserted. Many of the *stūpas* were also in ruins. The building containing the Buddha's alms-bowl was also in ruins.[2] The famous *stūpa* built by Kaṇiṣka had been destroyed by fire and it was being restored.[3] Similarly, the monastery built by Kaṇiṣka was also in ruins and the chamber once occupied by Pārśva had dilapidated. Even the number of monks living there seems to have been reduced considerably.[4] Similarly, to the north of the city of Puṣkalāvati (*Pu-se-ka-lo-fa-ti*), he noticed an old monastery in ruins and with only a few monks.[5]

Hsuan-Tsang also gives a detailed account of the city of Taxila (*Ta-cha-shi-lo*). The country of Taxila was about 2000 *li* in circuit, its capital being about ten *li* in circuit. The chiefs were in an open state of feud and the royal family had been extinct. Formerly the country was under Kapisa, but at that time it was a dependency of Kashmir. These political disturbances must have affected the urban centres of the area. Although there were many monasteries, they were in a dilapidated condition and the number of monks had been diminished.[6] Similarly, he noticed a Buddhist monastery at Sinhapura (*Seng-ha-pu-lo*) which had long been unoccupied.[7]

From the accounts of Hsuan-Tsang it emerges that the once rich region of Gandhāra with its populous and flourishing cities was in a state of decline and desolation. Although the pilgrim mainly refers to the religious establishments and structures of the area, there is no doubt that their decay was directly connected with an overall decline in the country. These religi-

ous establishments flourished basically on the donations of the people, but with the decline in economic prosperity, such endowments became impossible and this must have led to the decline and desolation of the religious establishments. Moreover, Hsuan-Tsang also incidentally refers to the ruined and desolate condition of certain settlements. Both taken together undoubtedly point to the fact that the region of Gandhāra was in a state of decay.

Hsuan-Tsang is fully corroborated by the excavations carried out in the Gandhāra region. The city of Puskalavati (Charsada) seems to have suffered largely at the hands of Mihirakula, the Huna chief, towards the beginning of the 6th century A.D. Being anti-Buddhist, he is said to have destroyed nearly 16,000 monasteries and *stupas* in the region of Gandhara. Excavations in the neighbourhood of Puṣkalāvati, especially at Patatu and Ghar dheris, suggest that the Buddhist structures were deliberately destroyed, possibly by an invading army. The numismatic evidence makes it obvious that destruction befell this area some time towards the end of the Kuṣāṅa period.[8] Wheeler's excavation leaves no doubt as to the complete destruction and disappearance of this urban settlement by the 7th century A.D.[9] This is further corroborated by Al-Biruni, who, while describing the route from Kanauj to Ghazni, refers to Chind and Peshawar, but not to Puṣkalāvati. This suggests that by A.D. 1030 Puṣkalāvati had been pushed into oblivion.[10]

The city at Saikhan Dheri too lost its metropolitan character towards the end of the Kuṣāṇa rule. The site has yielded a total number of 219 Kuṣāṇa coins belonging to the following kinds :

Kujula Kadphises	5
Wema Kadphises	60
Soter Megas (unidentified)	38
Kaṇiṣka	77
Huviṣka	31
Vāsudeva	8
Total	219[11]

Thus, the coins of Vāsudeva are fewer in number and of

cruder variety,[12] a fact which might suggest the decaying nature of the site. The excavations also revealed that during the last stage of the habitation in the city its area shrank considerably due to floods in river Zinde. This led to the shifting of the settlement to the neighbouring town of Rajar towards the close of the 2nd or the beginning of the 3rd century A.D.[13]

The same story of decline and destruction is repeated at the sites of Taxila. The Bhir Mound, the earliest site, became desolate by 2nd century B.C. mainly because of the shifting of occupation to a new site, called Sirkap. The Bhir Mound remained partially occupied but only for a very small period.[14] The new city site of Sirkap had also a similar fate in store. This site remained in occupation for about three centuries during the successive domination of Greek, Śaka, Parthian and Kuṣāṇa rulers down to the time of Wema Kadphises, when the city was again shifted to the new site of Sirsukh.[15] The site has, however, yielded the following coins belonging to the successors of Wema Kadphises :

Kaṇiṣka	39
Huviṣka	5
Vāsudeva	27
Later Kuṣāṇas	4[16]
Huviṣka(from Mahal area)[17]	1
Total	76

It can be suggested that after the capital had been shifted to Sirsukh, part of the population must have continued to live on in Sirkap, just as in earlier days it had continued to live on at the Bhir Mound. This explains why a certain number of the coins of Kaṇiṣka and his immediate successors as well as a few of the later Kuṣāṇas have been found at Sirkap. Thus, even the numismatic evidence suggests that the site was abandoned after the Kuṣāṇas, to be reoccupied only in the medieval period. A. Ghosh suggests that the city of Sirkap declined some time between A.D. 150 and 200.[18]

Sirsukh, the last city of Taxila, founded by the Kuṣāṇas, did not thrive for long. Although because of limited excavation of the site the chronology of the site is not very clear, the

coins discovered are very helpful in this context. The three distinct groups of coins belonging to the Kuṣāṇas, Indo-Sassanians and Mughals[19] suggest that the site was abandoned after the Sassanians. That the city was not in a flourishing condition is also attested to by the fact that at almost all the Buddhist sites in and around Taxila, coins become scarce in the post-Kuṣāṇa period. These sites, though chronologically elusive, make interesting reading on the basis of the coins which have been discovered from there. The following chart may provide an idea of the number of Kuṣāṇa (up to Vāsudeva I) and post-Kuṣāṇa (including later Kuṣāṇa, Sassanian, Indo-Sassanian and Hūṇa) coins found at different sites in and around the city of Sirsukh.[20]

Sites	*Kuṣāṇa Coins*	*Post-Kuṣāṇa Coins*	*Total*
1. Piṇḍorā-Tofkiāñ	30	7	37
2. Temple of Jaṇḍiāl	17	2 (including 1 of Harṣa of Kashmir)	19
3. Mound D, Jaṇḍiāl	9	1	10
4. Dharmarājikā	1485	460	1945
5. Site "A"	2	—	2
6. Site "B" (Akhaurī)	262	—	262
7. Site "C"	12	—	12
8. Site "D" (Khāder Mohrā)	5	1	6
9. Kālawān	190	9	199
10. Giri	10	141	151[21]
11. *Stūpa* of Kunāla	46	1	47
12. *Stūpa* of Ghai	2	—	2
13. Mound B, Jaṇḍiāl	5	—	5
14. Mohrā Morādu	64	11	75
15. Pippala	8	16	24
16. Jauliañ	95	97	192
17. Lālchak	—	13	13
18. Bhamāla	6	306	312
Total	2248	1065	3313

The chart indicates that out of the total number of 3313 coins of the Kaṣāṇa and post-Kuṣāṇa periods discovered from the various sites at Sirsukh, 2248 coins belonged to the

imperial Kuṣāṇas and only 1065 to the later periods. The numismatic eirdence apparently indicates the retrogession in post-Kuṣāṇa Gandhāra economy, a situation certainly not congenial for the urban settlement. Moreover. the last series of coin-issues forthcoming from these sites generally belongs to the Sassanian and Indo-Sassanian periods, and in some cases to the Hūṇas. Not even a single piece of Gupta currency has been discovered so far. This will indicate that the site was destroyed mainly by the Sasanians and the Indo-Sassanians, while the still occupied areas received the death-blow from the Hūṇas, who even burnt some of the religious establishments at Taxila. The clear signs of fire noticed at the 'Court H' of Dharmarājikā,[22] and Bhāmala[23] along with the skeletal remains, the heads of whom are severed from their bodies and lying in association with burnt objects, found at Dharmarājikā,[24] make it apparent that the site was burnt and the inhabitants massacred probably by the Hūṇas towards the end of the 5th century A.D. Marshall even suggests that most of the Buddhist establishments had been deserted by the middle of the 3rd centusy B.C.[25] On the basis of the remains forthcoming from the neighbouring areas too, it becomes obvious that the post-Kuṣāṇa phase was one of decline. Thus, in spite of Marshall's suggestion, it can be asserted without fear of contradiction that by the end of the 5th century A.D. the region of Gandhāra lay in ruins.

Regarding Kashmir and Jammu too Hsuan-Tsang noticed certain specific instances of decay as far as the Buddhist establishments were concerned. Thus, he refers to the ruins of a fine large monastery on a monntain At the time of his visit, only a two-storeyed building in one corner of its compound was inhabited by only 30 monks.[26] Similarly, the five Buddhist monasteries at Poonch (*Pan-nu-ts'o*) were all ruined and in a monastery to the north of the capital only a few monks resided.[27] Similarly at Rājapura (*Ho-lo-she-pu-lo*), though there were 10 *sanghārāmas*, only very few monks lived.[28] It is interesting to note in this context that Hsuan-Tsang describes the residents of Kashmir as coarse and plain in personal appearance with vulgar dialects,[29] a description which is reserved for rural people in some of our ancient texts.

Excavations and explorations carried out in the region of Kashmir, though neither many nor informative, roughly corroborate the general pattern of decay suggested by Hsuan-Tsang. The antiquarian remains of the area belonging to post-Gupta period are materially too poor to indicate any signs of urban life. Sites like Harawan (near Srinagar), Akhnur, Ambaran, Mandli-ka-Mehra, Guda, Bahor, Dalpat, Kat, Sauli-Chak and Pambarwan have yielded Kuṣāṇa as well as Gupta pottery and terracotta.[30] These sites do not seem to have yielded any post-Gupta antiquity, suggesting their desertion by that time. Some of the sites, like Ambi, Bamal, Bandwal, Kurora, Lehrian, Man-Chak, Mandiala and Ratti-Danda, all yielding stamped and glazed pottery of the medieval period,[31] cannot be precisely dated but they certainly seem to to have belonged to a late period.

The situation in the Punjab was hardly any different. Archaeology very well attests to the decline in urban centres which flourished under the Kuṣāṇas. Four sites of *tehsil* Jagadhari, which were explored, have yielded pottery of pre-Gupta times. While Kakrauni yielded PGW, NBP, black-painted red ware and incised ware, and Chanda-Kheri yielded grey ware, black-slipped and black-painted red wares, Deel-Chapper and Saundha have yielded the remains of the early Christian era including the Red Polished Ware.[32] All these sites seem to have been abandoned some time during the post-Kuṣāṇa period. Similarly, exploration in district Amritsar has resulted in the discovery of early historical and historical sites. While early historical sites were located at Makhan-Windi and Mattewal, historical sites yielding black-slipped, black-and-red and grey ware located at Argan-Manga, Chawinda, Ghari, Ghugatwind-Hinduan, Khabba, Kotli-Mallian and Taragarh II. Remains of the early historical period of *c.* 1st-2nd century A.D., including black-painted red ware and Red Polished Ware, were found at Fattehpur, Rajputan and Vadall-Dogran.[33] As is obvious all these sites seem to have gone out of occupation during the post-Kuṣāṇa phase.

The explorations in Phillaur *tehsil* of district Jullundur repeat a similar pattern of habitation. Ten sites of this area have yielded Kuṣāṇa red-ware followed by 'Muslim' glazed ware. Out of these sites, three sites reveal only Kuṣāṇa and

'Muslim' ware and the remaining seem to be of much earlier origin, some of them yielding even Harappan pottery.[34] It has been suggested that, at least, two of these sites may be regarded as urban centres.[35] Anyway, the picture that emerges is one of abandonment of these sites in the post-Kuṣāṇa period for quite a considerable period of time, and their reoccupation only when the Muslims came to India. Similar explorations in districts Ambala and Amritsar have brought to light a number of sites where the latest pottery discovered belongs to the Śunga-Kuṣāṇa phase,[36] suggesting thereby the decay of the site in the post-Kuṣāṇa phase.

Sanghol, in Ludhiana district, also seems to have declined during the post-Gupta period. The post-NBP level is dominated by a mud rampart whose wall was raised later. The defence system is ascribed to *c.* A D. 50-500 and consisted of a series of three moats.[37] The deposit against the raised wall yielded Kuṣāṇa and Gupta antiquities. Several structures of mud bricks and baked bricks, drains, sullage, water-jars and ovens were exposed in the various levels of this period. Noteworthy finds included : (i) coins of the Indo-Parthians, Kuṣāṇas, some tribal states; (ii) terracotta coin mould of Gondophares; (iii) three sealings, two of which bear legends in early Gupta Brāhmī; (iv) terracotta figurines; and (v) votive tanks [38] This clearly indicates that the site remained occupied till the days of the Guptas.[39] In contrast the post-Gupta level is represented by a thin occupation and represents pre-Mughal glazed ware and other associated finds.[40] This makes it obvious that the settlement of Sanghol which was flourishing till the Gupta period started decaying in the late Gupta or post-Gupta times.

In the case of Rupar (district Rupar), one notices a slightly different pattern. Period IV covering the Śunga-Kuṣāṇa-Gupta phase (*c.* 200 B.C.-A.D. 500) reveals successive building layers. In the upper levels were found a large hoard of copper coins of Kuṣāṇa and Gupta rulers, including a gold coin of Chandragupta I-Kumāradevī type. The period has not only yielded numerous datable objects, but is also rich in dwellings. After a short break, there is evidence of a new occupation (Period V) commencing about the early 6th century and lasting for two or three centuries. A distinct setback can, however, be noticed, for the occupation now became confined to the southern part

of the site. This period, however, came to an end in the 9th century A.D. and the site was abandoned for quite a long time, to be reoccupied only in the 13th century A.D.[41] Thus, the settlement at Rupar started dwindling from the 6th century A.D. and it was completely abandoned some time in the 9th century A.D.

The neighbouring site at Bara (district Ambala) is bereft of Gupta deposits. Here the lower datable deposits in the historical period belong to Kuṣāṇa times and the upper to the medieval period.[42] Although the report does not clarify the term 'medieval', it has been taken to refer to the period from the establishment of the Sultanate,[43] i.e., the late Medieval period. At any rate the site seems to have been abandoned in the post-Kuṣāṇa period for quite a long period.

A similar situation seems to have obtained at Ajaram (near Hoshiarpur) also. The site has not yielded even a single post-Kuṣāṇa coin. The discovery of only the coins of Taxila, Indo-Greeks and Kuṣāṇas,[44] suggests that the site probably lost its importance *inter alia* its urban status in the post-Kuṣāṇa period.

Excavation at Sugh (district Ambala) also suggests that the site became decadent after the Kuṣāṇa period. The site has yielded Śunga-Kuṣāṇa terracotta animal figurines and revealed the remains of a large rectangular burnt-brick structure of early historical period which seemed to be either a fortress or an enclosure of some monastery and the size of the bricks[45] compares favourably with the Kuṣāṇa bricks used at other sites. The site has not yielded any post-Kuṣāṇa object, a fact which suggests the abandonment of the site after the Kuṣāṇa phase.

In Haryana also the pattern of urban decline in the Gupta and post-Gupta times is unmistakably noticeable. Thus, the site of Daulatpur (district Karnal), which shows a break in occupation after the Harappa phase, remained in continuous occupation thereafter from PGW times to the early medieval period. Period III representing the pre-medieval phase seems quite rich in material deposits including coins, clay sealings and iron objects, but the succeeding phase has only a thin occupation at the top levels of the mound.[46] This suggests that although the site survived the Gupta period, it neither remained as flourish-

ing site nor could it continue for any appreciable period of time.

Rājā-Karṇa-kā-Qilā at Kurukṣetra (district Kurukṣetra), however, seems to have been abandoned immediately after the Kuṣāṇas. It was occupied from *c.* 400 B.C. to A D. 300. The last period beginning from the early Christian era yielded red polished ware, copper coins and a variety of household objects of iron along with other objects.[47] Among the notable finds were three clay sealings, bearing legends in Brāhmī script of the early centuries of the Christian era.[48] It showed seven structural phases, generally made of mud bricks (37×23×7 cm); in the upper levels the use of baked bricks of the same size was also attested.[49] The next phase is characterised by the use of *lakhauri* bricks and pre-Mughal glazed ware.[50] This suggests that immediately after *c.* A.D. 300 the site was abandoned and remained so for quite a long time.

The archaeological evidence at Purana Qila (New Delhi) too is quite clear as far as the decline of this urban settlement in the Gupta and post-Gupta times is concerned. The evidence suggests in unmistakable terms that the site remained in continuous occupation till the present day, but the earlier prosperity started waning from the Gupta times. Thus, while the Śaka-Kuṣāṇa period was distinguished by the remains of regularly built structures of baked bricks, the Gupta period was represented by structural remains built of baked bricks robbed from the houses of the preceding period.[51] Numerically also while the Kuṣāṇa period presented 4-5 structural phases, the Gupta period presents only 3-4 phases of construction.[52] Antiquity-wise too the Gupta layer reflects inferiority in comparison with the preceding period. Thus, while the Śaka-Kuṣāṇa layer yielded copper coins of Mathurā kings, Kuṣāṇas and Yaudheyas, bone dics of various types, terracotta figurines, pottery, crucibles, a small piece of an ivory handle and a plaque showing three elephant-riders,[53] the Gupta antiquities include a sealing, one gold-plaited coin of archer type belonging to some later Gupta ruler, a few terracotta human figurines, a broken shell bangle, a small damaged *mukha-linga* and sealings, etc.[54] The post-Gupta layers betray more distinct signs of decline. This period had only few structures, some with sagging walls, and generally made of reused bricks.[55] Though the structural remains in

burnt bricks formed three phases, baked bricks were mostly used in fragments and robbed from the houses of the earlier periods.[56] Thus, there is a clear evidence of decline in the Gupta period, and more so in the post-Gupta phase; it is not before the "Rajput" phase that fine structural phases of both reused bricks and mud-bricks along with a fortification wall are revealed,[57] which possibly belonged to the time of the Tomaras.

The same pattern of decline and, at times, desolation can also be noticed at the various sites of Rajasthan. Explorations made in the districts of Bharatpur, Sawai Madhopur and Tonk suggest that many a site was abandoned after the Kuṣāṇa period. The following table may provide an idea of the occupational pattern of these sites.[58]

[PG=Painted Grey Ware; G=Grey Ware; R=Red Ware (Kuṣāṇa); T=Terracottas]

	District	*Site*	*Associated wares and other finds*
1.	Bharatpur	Abar	PG, R
2.	,,	Bachamdi	R
3.	,,	Bahnera	R, G
4.	,,	Barso	R
5.	,,	Naogaya	R, Kuṣāna bricks
6.	,,	Satwas	R, T
7.	,,	Viravai	PG, R
8.	Sawai Madhopur	Richocha	R
9.	Tonk	Pachala	R, Kuṣāna bricks

From the above table it becomes clear that all the nine sites were probably abandoned after the Kuṣāṇa period, because none of these sites has yielded any post-Kuṣāṇa antiquity. Some of the sites had quite an early origin as is clear from their association with the Painted Grey Ware, but even these sites seem to have completely declined in the post-Kuṣāṇa period.

The excavated sites of the area have a somewhat similar story to tell. Thus Noh, in the district of Bharatpur, hardly shows any sign of occupation after Kuṣāṇa times. The last period of occupation characterised by the Śunga-Kuṣāṇa period is marked by eight structural phases.[59] It yielded terracotta

animal figures, typical Kuṣāṇa pottery, copper coins and a well-preserved smelting-furnace with a large quantity of iron slag.[60] The site is bereft of any post-Kuṣāṇa antiquity. The 1963-64 excavation, however, suggested the exposure of a layer ascribed to the seventh-eighth century A.D. But the excavators themselves termed this phase of occupation as one of "poverty and decadence".[61] In the subsequent excavations, however, no post-Kuṣāṇa layer with any habitation or occupation was discovered. Thus, the unmistakable impression is one of abandonment of the settlement of Noh in the post-Kuṣāṇa period.

The next important urban centre of this area, Bairat (district Jaipur), also seems to have decayed in the post-Kuṣāṇa period. Hsuan-Tsang, who visited this place, hints at such a situation. The pilgrim, who is more concerned with the description of Buddhist establishments, records that Bairat (*P'o-li-ye-ta-lo*) had eight Buddhist monasteries in a bad state of ruin and the monks were very few in number. He adds that non-Buddhists were 1000 in number.[62] This suggests that the total number of inhabitants of Bairat at the time of Hsuan-Tsang's visit was only a little over 1000, a size which certainly suggests that the city was in a state of decline. Hsuan-Tsang's suggestion is fully corroborated by archaeological excavation carried at this site. Excavation has yielded ceramics of the early centuries of the Christian era, but no Gupta antiquities. Its Period III, belonging to the early centuries of the Christian era, is followed, after an appreciable lapse of time, by Period IV, which has medieval glazed ware.[63] This clearly suggests that the site had declined during the post-Kuṣāṇa phase for quite a considerable period of time. Another ancient town of Rajasthan, Nagara or Karkota Nagara situated near Tonk, was also ruined towards the end of the 4th or the beginning of the 5th century A.D.,[64] and thus, seems to conform to the general pattern of urban decline in this area.

The picture of decline and desolation is also unmistakable at the various sites of U.P. Explorations made in different areas clearly indicate that there was some sort of desertion of sites in the post-Kuṣāṇa phase. Some 20 sites explored in the districts of Meerut and Muzaffarnagar indicate a similar pattern. The following chart of the explored sites with their cultural assemblage may clarify the picture:[65]

(H=thick red ware, possibly Harappan; OC=ochre-coloured ware; PG=Painted Grey Ware; G=grey ware, associated with the NBP; BS=black-slipped ware; BR=black-and-red ware; R=red ware of the Śunga-Kuṣāṇa assemblage; and M=medieval ware)

	District	Site	Ware
1.	Meerut	Akbarpurgarhi	R, M
2.	,,	Ferozpur	R, M
3.	,,	Godha	G, R
4.	,,	Humyaunpur	R, M
5,	,,	Khai-Khera	R, M
6.	,,	Kuri-Kamalpur	R, M
7.	,,	Mahmudyur-Sikera	R. M
8.	,,	Maur-Khurd	R, M
9.	,,	Parichhatgarh	PG, G, R, M
10.	,,	Shondat	G, R, M
11.	,,	Tajpur	R, M
12.	Muzaffarnagar	Bhoapur	R, M
13.	,,	Jatwara	G, R, M
14.	,;	Kailapur	H, PG, BS, G, R, M
15.	,,	Kaithora	PG. G. BS. R, M
16,	,,	Khai-Khera (Mimalkheri)	G, R, M
17.	,,	Kheri-sarai	G, BS, R, M
18.	,,	Mukallampur	R, M
19.	,,	Shukartar	R, M
20.	,,	Sikrera	OC, PG, G, BS, R, M

Out of these 20 sites, in the case of 19 the red ware characteristic of the Kuṣāṇa times was succeeded by medieval ware, suggesting the desolation of these sites in the post-Kuṣāṇa period for quite a long time. In the case of the site, Godha, the red ware is the last deposit suggesting the final abandonment of the site after the Kuṣāṇas.

Some other explored sites of Muzaffarnagar also repeat this pattern. Three of the sites evplored in 1963-65, i.e., Sikri, Baheri and Nurnagar have yielded a number of objects, none of which can be ascribed to the Gupta period. In all the three cases the Kuṣāṇa red ware is followed by the medieval ware, suggesting an occupational break during the post-Kuṣāṇa phase.

One site, Rai, which yields the Kuṣāṇa red ware along with a host of other associated finds seems to have been finally deserted after the Kuṣāṇa period.[66]

The different explored sites of district Saharanpur also indicate an overall desolation of sites in the post-Kuṣāṇa period. The following chart of the various explored sites of the district along with the associated finds is quite illuminating.[67]

(H=Harappan materials; OC=ochre-coloured ware; PG=Painted Grey Ware; NBP=material associated with the Northern Black Polished Ware; R=red ware of the Śunga-Kuṣāṇa phase; and M=medieval ware)

Site	*Wāre*
1. Kenduki	NBP, R, M
2. Unchagaon	NBP, R, M
3. Anwarpur-Baraoli	R, M
4. Bhankror	R, M
5. Bholni	OC, R, M
6. Budhakhera	OC(?), PG, NBP, R, M
7. Dandauli	R, M
8. Jainer	H, R, M
9. Janipvr	OC, R, M
10. Khajnavar	R, M
11. Khirka-Zunarkar	R, M
12. Khurrampur	R, M
13. Lodipur	NBP, R, M
14. Mandowala	OC(?), NBP, R, M
15. Muzaffarabad	R, M
16. Patlokar	R, M
17. Taharpur	OC, R, M

In the case of all these 17 sites the Kuṣāṇa red ware is followed by the medieval ware. This certainly indicates that the site was deserted after the Kuṣāṇas for quite a long time.

Explorations in districts Bulandshahr, Etah and Moradabad also confirm the pattern of post-Kuṣāṇa desertion of sites. The explored sites with their cultural assemblage are as follows:[68]

(OC=ochre-coloured pottery; BR=black-and-red ware; PG=Painted Grey Ware; G=grey ware, NBP=Northern Black Polished Ware; BS=black-slipped ware; R=red ware of the Śunga-Kuṣāṇa phase; and M=medieval ware)

District	*Site*	*Ware*
1. Bulandshar	Ahar	G, R, M
2. ,,	Akrabas	OC, R, M
3. ,,	Chandpur	OC, PG, R
4. ,,	Danpur	R, M
5. ,,	Shakoorganj	BR, PG. G, BS, R
6. ,,	Yaseenpur	PG, G, BS, R
7. ,,	Ahmadgarh	BR, PG, G, BS, R
8. ,,	Pindrawal	G, R, M
9. Etah	Lohiakhera	G, BS, R, M
10. Moradabad	Karwarkhera	OC(?), R, M
11. ,,	Khera Khas	R, M
12. ,,	Sarthalkhera	G, R, M

Out of these 12 sites, four seem to have been completely abandoned after the Kuṣāṇa period, for they have not yielded any later antiquity. On the other hand, in the case of rest of the sites the Kuṣāṇa red ware is followed by medieval ware suggesting that the site was deserted for a considerable period after the Kuṣānas.

Of the excavated sites, Hastināpura in the district of Meerut repeats the familiar pattern of habitational phase. This site remained in continual occupation from pre-1200 B.C. to A.D. 300, except for a break of 50 years or so from *c.* 250 B.C. Period IV of the site (*c.* 200 B.C.-A.D. 300) has exclusively red-ware industry. The houses of this period were mostly made of burnt bricks and the layout of the houses clearly indicates a predilection for orientation approximately along the cardinal directions. The phase has yielded the coins of the kings of Mathurā, Yaudheyas and Kuṣāṇas, along with copper and iron objects. In the upper levels were discovered the imitation coins of king Vāsudeva of *c.* 250 B.a. The archaeological evidence suggests that the site was deserted immediately after this period and came to be reoccupied only from about A.D. 1100.[69] This clearly suggests that Hastināpura, which was in a flourishing state under the Kuṣāṇas, went out of occupation in the Gupta and post-Gupta times.

In the same district, the rural site of Kaseri confirms the occupational pattern illustrated at Hastināpura. This site was first of all occupied by ochre-coloured ware using people and

remained in continuous occupation till the post-Gupta times, but with certain distinct changes. While the Kuṣāṇa phase is illustrated by the predominance of red wares, the Gupta and post-Gupta phases have fewer signs of occupation with hardly and worthwhile relics.[70] The evidence from Kaseri indicates that the post-Kusāṇa phase is not a period of decay for urban centres only, even some rural centres declined during this period.

Atranjikhera (district Etah) is also devoid of Gupta antiquities and it seems that the site declined after the Kuṣāna period. The ceramics of Period IV (*c.* 200 B.C.-A.D. 300) consisted of a dominant red ware of medium fabric, assignable to the early centuries of the Christian era. The Period also exposed an interesting house-complex of burnt bricks in conjunction with the structures of the previous period.[71] Besides a number of other antiquities, two copper coins of Vāsudeva[72] and a coin mould from this layer[73] were also discovered. Although during the course of an exploration of the site minor Gupta antiquities were noticed,[74] but excavation did not expose any Gupta occupational layer. In post-A.D. 300 period the site was deserted[75] and came to be reoccupied in the medieval period.

Mathurā, which was a very prosperous urban centre under the Kuṣāṇas, seems to have lost much of its prosperity in the succeeding period. The place was visted by Fa-hsien and Hsuan-Tsang and both of them noticed the existence of 20 Buddhist monasteries. But while Fa-hsien records the presence of 3000 Buddhist monks in the city,[76] Hsuan-Tsang estimates their number to be only 2000,[77] a fact which indicates the decline in population by the time of the latter. Surprisingly, the various arts and crafts that flourished in this city seem to have completely declined, for the only reference is to the textile industry.[78] From Hsuan-Tsang's account, it seems that the people were economically more dependent on agriculture than on any urban craft.[79] This implies that Mathurā had partially lost its urban status and it was on the wane when the Chinese pilgrims visited the place.

The decline of Mathurā in the post-Knṣāṇa period is also indicated by the archaeological evidence. The site, which seems to have been temporarily deserted after the NBP phase, certainly

came to be reoccupied under the Kuṣāṇas. The Kuṣāṇa phase represented by Period III yielded beads of different types of precious stones, copper coins including those of the Kuṣāṇas, and terracotta figurines which compare well with those discovered from Ahichchhatra belonging to the levels datable to *c.* A.D. 100-300.[80] Although Gupta terracottas were found in the last period,[81] structures were not noticed. This stratigraphic evidence is more or less corroborated by the epigraphic evidence forthcoming from this site. Thus, whereas 68 Śaka-Kuṣāṇa inscriptions mostly belonging to the first two centuries of the Christian era were found here, those belonging to the Gupta period are almost negligible in number.[82] These evidences clearly imply the decline of Mathurā in the post-Kuṣāṇa period.

This pattern of structural history is confirmed by the material remains of Sonkh, situated in the same district. This site which came to be occupied by the PGW people underwent a clear structural decline in the post-Kuṣāṇa phase. Structural remains belonging to the Kuṣāṇa period along with 112 coins mostly belonging to the imperial Kuṣāṇas were noticed here. It also revealed stone plaques of Durga, Skanda, Viṣṇu and Mātṛkās showing typical Kuṣāṇa features.[83] The most impressive structural remains of the period were two apsidal temples made of burnt bricks.[84] In contrast the Gupta level is poor and the remains consisted of badly built structures of reused Kuṣāṇa bricks.[85] Although a few Gupta relics, i.e., an unburnt clay seal inscribed in Gupta characters, a terracotta relief and a small Gupta Viṣṇu image of sandstone, have been noticed, no Gupta coins have been reported.[86] In fact, the Gupta level is so poor that in course of an excavation immediately below the deposits of the early medieval period, the remains of a late Kuṣāṇa structure were exposed[87] without encountering any Gupta antiquities or structures. The general impression that one gets from the material remains of this site is one of its decline during the Gupta period and abandonment in the post-Gupta times till its reoccupation in the 9th century A.D.[88]

Manwan, in the district of Sitapur, also seems to have been deserted in the post-Gupta period. This site remained in occupation from *c.* 500 B.C. to medieval times, but it was abandoned in the post-Gupta period for a considerable period of time, to be reoccupied only in 'early medieval' times. The NBP phase

with two structures was succeeded by the Śunga-Kuṣāṇa phase characterised by the appearance of sprinklers and terracotta sealings bearing legends in early Brāhmī script. The Gupta level is represented by terracotta figurines. This is followed by a total absence of antiquities or structures till the beginning of the 'Muslim' period and the excavator tells that the site was reoccupied in 'early medieval' times, which is represented by the typical Muslim pottery.[89] This suggests that the settlement at Manwan remained uninhabited for about six centuries after the Gupta period.

At Śrāvastī, on the borders of Gonda and Bahraich districts, too the process of decline had set in towards tha beginning of the Christian era. Both Fa-hsien and Hsuan-Tsang, who visited this place, explicitly refer to a state of decadence. Fa-hsien mentions that inside the city the people are few and scattered, amounting in all to some two hundred families.[90] By the time of Hsuan-Tsang the situation had further deteriorated. The pilgrim records that the "capital" of Śrāvastī (*Shih-lo-fa-si-tī*) was a wild ruin without anything to define its areas; the "Palace city" was a ruinous waste and out of 700 Buddhist monasteries most were in ruins.[91] Long ago Cuuningham had suggested that Śrāvastī declined during the 4th century A.D. but he wrongly associated this development with the "fall of the Gupta dynasty in A.D. 319" (*sic* !).[92] Though Cunningham's date for the decline of the Guptas can be accepted by none, his assertion about the decline of Śrāvastī, which was a flourishing centre during the Kuṣāṇa phase, in the Gupta period seems to be quite true. Recent excavations also indicate that the city lost its metropolitan character during the early centuries of the Christian era.[93] The excavated materials of Set-Mahet, together with the two inscriptions of Kaṇiṣka I found from there, suggest that the town was in a flourishing stage in the 1st century A.D.[94] The settlement, however, seems to have declined during the 4th century A.D.

Bhīṭā near Allahabad also suggests a definite decline during the post-Kuṣāṇa period. The stratigraphical position of the site is, however, not very clear due to the nature of excavation carried out at this site. However, Marshall identifies structures belonging to that of the Maurya period and 1st century B.C. and 1st century A.D.[95] But though the site has yielded predominantly

Gupta seals and sealings belonging to farmers and artisans, the remains of the Gupta structures are of poor construction and so mutilated that their plan cannot be restored.[96] Marshall, in fact, suggests that some of the houses were hurriedly excavated due to some catastrophe in the Kuṣāṇa period as can be inferred from coins and other objects scattered on the ground as well as by subsequent accumulation of debris in rooms and courtyards.[97] The city seems to have faced another catastrophe and subsequent desertion in the early Gupta period. This was probably the result of an attack on the city as can be inferred from the discovery of many missiles from houses and lanes as well as the burnt condition of the houses, and the sacred images found *in situ*.[98] That the city started losing its importance from the Gupta period is also borne out by the numismatic evidence. Thus, while 17 copper coins of Kuṇiṣka and Huviṣka were discovered,[99] not even a single Gupta coin was noticed. The site has, however, yielded pottery ranging from Maurya to medieval times; some terracottas of the 8th-10th centuries have also been discovered. In spite of these discoveries, the structural as well as numismatic evidences clearly suggest that the city was decaying during the post-Kuṣāṇa period, and certainly lost all its importance from the post-Gupta times. The signs of habitation belonging to the post-Gupta period are very poor and, at most, they can suggest the existence of a very small rural settlement during this period.

Mainahai, another site in the district of Allahabad, has exposed sixteen walls of burnt bricks and two of stone, all belonging to the period between 1st and 4th centuries A.D. The latter walls formed part of a huge building, possibly of a religious character. About 300 sculptures and sculptural fragments were also discovered. Nearly ten fragmentary inscriptions, paleographically belonging to the post-Mauryan times, were also recovered from the debris of the last period.[100] The structures, sculptures and epigraphs clearly suggest that this was an important site, probably a place of religious significance. But this site too declined during the 4th century A.D., and the excavators too have assigned a date from the 1st to the 4th century A.D. for this occupation.[101]

Excavations carried out over a large area at Kauśāmbī, about 40 miles from Allahabad, confirm the general pattern of

habitational history in this region. As in the case of other sites of the district, this area too is richer in Kuṣāna relics in comparison with those forthcoming from the Gupta levels.[102] The late phase of Sub-Period V and the beginnings of Sub-Period VI represents the Kuṣāṇa phase and they have yielded Kuṣāṇa coins and sealings. The next phase, Sub-Period VII (A.D. 175-250), has yielded only coins of the Maghas who succeeded the Kuṣāṇas at Kauśāmbī.[103] The last coin-issue belonged to king Gaṇendra or Gaṇapatināga discovered in layer I, only 4 inches below the present surface. The excavator suggests, therefore, that at the time this coin was deposited the occupation of Sub-Period VII had not only been deserted but also destroyed to its very foundations.[104] This inference is rather confirmed by the complete absence of any finds belonging to the early Gupta period.[105] The site was, therefore, apparently abandoned even before the appearance of the Guptas on the scene. Hsuan-Tsang's description of Kauśāmbī (*Kiao-shang-mi*) also attests to the decline of this urban settlement. He says that the place had ten Buddhist monasteries, but all were utterly ruined.[106] He then refers to the ruins of the house of the Elder Ghośila situated in the south-east corner of the city and the nearby ruined bath-house of the Buddha.[107] This description together with the archaeological evidence leaves no doubt as to the decline of Kauśāmbī in the post-Kuṣāṇa period.

Ahichchhatra, in the district of Bareilly, represents the most prosperous period of building activity during the Kuṣāṇa stratum. Burnt bricks in mud mortar were freely used in the construction of houses.[108] The pottery belonging to this period is varied in nature and design[109] and reflects the prosperity of the times. Among other objects mention may be made of copper coins including those of the Kuṣāṇas, the Pañchālas and Achyuta (*c.* A.D. 350), objects of iron and copper, beads of terracotta and other semi-precious stones, etc.[110] Although the site continued in existence up to *c.* A D. 1100, it showed poor buildings.[111] Moreover, the recent excavations at this site have failed to expose any worthwhile object that can be ascribed to the late Gupta or post-Gupta times. That the site had definitely declined is also attested to by the concentration of habitation in one part of the settlement.[112] It seems that this site remained prosperous till the 4th century A.D., after which the process of

pecline set in and it started losing much of its earlier prosperity.

The ancient city of Kapilavastu seems to have met a similar fate. Fa-hsien saw the city in ruins. He records that neither the king nor any people could be found in this city which was just like a wilderness, except for priests and some ten families.[113] He further adds, "The country of Kapilavastu is desolate and barren, with very few inhabitants. On the roads, white elephants and lions are to be feared; travellers must not be incautious."[114] Hsuan-Tsang too gives a similar account of the area. He describes the country of Kapilavastu as "containing more than ten deserted cities all in utter ruin." The capital city was such a complete waste that its area could not be ascertained. The district had been left desolate for a very long time and so it was very sparsely inhabited. The country was without a sovereign, each city having its own respective chief; there were more than 1000 monasteries, all completely ruined.[115] This account of desolation and desertion of Kapilavastu is confirmed by the archaeological sources. Piprahwa (district Basti), which has been identified with the ancient city of Kapilavastu, betrays clear signs of decline after the Kuṣāṇa period. Clearance at the site has brought to light a "monastery-like" structure, having as many as 17 rooms partially exposed in the eastern side of the mound. The structure showing four structural phases was built of baked bricks set in lime mortar. On the basis of the occurrence of a spout of the Red Polished Ware the last but one phase had been dated to *c.* A.D. 200-300. The clearance in the north-western part of the site yielded an extensive flooring of burnt bricks, enclosed by walls on all sides and covering an area of 10.60 square metres, probably serving the purpose of a public hall.[116] Apparently this flooring belonged to the Kuṣāṇa period because such structures have also been found at the Kuṣāṇa levels at Ahichchhatra, Atranjikhera and Purana Qila. The clearance, however, seems to fail to record any Gupta relics or structures, a fact which might indicate that this site was abandoned in the post-Kuṣāṇa times.

Ayodhya too seems to have started declining in importance during the post-Kuṣāṇa phase. Hsuan-Tsang, who visited this place, noticed some ruined foundation walls, ruins of a monastery and the ruins of the preaching hall of Asanga and the remains of the hall in which Vāsubandhu had expounded

Buddhism to princes, etc.[117] Excavations at Ayodhya have not been very illustrative, but cutting in AY-1, AY-2 and AY-3 indicates that the site was occupied from the NBP times. The upper levels of the NBP phase yielded six terracotta human figurines grey in colour, and two Ayodhya coins along with few iron objects. Though there is a massive brick structure at Kubera-Tila with several phases of construction, it has not been identified chronologically; perhaps it belonged to the Kuṣāṇa period.[118] The post-Kuṣāṇa cultural sequence is meagre, which may suggest a distinct decline in the fortunes of this site. Even this meagre evidence together with the account of Hsuan-Tsang may be taken to indicate a decline in Ayodhya's fortunes especially from the Gupta times.

The archaeological evidence at Rājghāt in Varanasi suggests that the site started losing its earlier prosperity in the post-Kuṣāṇa period. An earlier excavation at this site revealed that as far as structural remains were concerned, the Kuṣāṇa period was the most flourishing period.[119] Subsequent excavations too give a somewhat similar impression. The maximum structural activity is noticeable in the NBP and Kuṣāṇa phases represented by Periods I and II, and III respectively. However, Period III (*c* 2nd-4th century A.D.)[120] is structurally the richest phase of this site. Remains of several walls and some impressive structures together with numerous relics[121] indicate the prosperity of this period. On the other hand, the period extending from A.D. 300-700 contains brick-built structures[122] with only a few Gupta relics.[123] Structural activity, however, stopped in Period V[124] (beginning from *c.* A.D. 700) and the material remains of this period were very poor.[125] Although the site remained in occupation up to *c.* A.D. 1700,[126] its eems that from the Gupta period the site started declining and this decline became marked in the post-Gupta period.

Sarai-Mohana, in the district of Varanasi, however indicates a clear desertion after the Kuṣāṇa period.[127] The site, which came to be occupied from the pre-NBP phase, has yielded objects of the early centuries of the Christian era in the shape of different types of wares. Structural activity was represented by a terracotta ring-well, partially with three rings intact. After that the site was deserted and came to be reoccupied in the late medieval times. From the cultural assemblage and

structural activity at the site one gets the impression that it was an established urban centre. But then this instance is illustrative in the sense that it somewhat confirms the evidence forthcoming from various urban sites of the area.

A somewhat similar pattern of break in occupation was repeated at Takiaper in the same district. Period I at the site, where two periods in all were recognised, was represented by the occurrence of the NBP along with other wares. Other finds included antimony rods, terracotta figurines, besides copper and iron objects, but no structures were encountered. Period II, distinguished by the cultural assemblage of the early centuries of the Christian era, was a prosperous phase of occupation. Two successive structural phases were encountered; while in the foundations of the buildings of the earlier phase the use of stone was very popular, structures of the later phase were only of large-sized bricks. The structures of this period are quite impressive. A black stone seal, inscribed in Brāhmī characters, assignable to the 1st-2nd century A.D., is another notable find.[128] The excavator, however, fails to notice any Gupta or post-Gupta relics or structures. It seems that after Period II the site was completely deserted.

Masaon,[129] in the Ghazipur district, also shows signs of decay from the post-Kuṣāṇa times. Altogether four cultural periods, ranging from *c.* 600, B.C. to A.D. 600, have been recognised at this site. Period III (*c.* 1st to 3rd centuries A.D.) representing the Kuṣāṇa period is the richest in structures and antiquities. Structures of baked bricks (39×25×6 cm) showing three rooms along with a brick flooring and a drain were exposed.[130] Besides other structural details, a road turning towards the west was also encountered.[131] Further structural remains of the period consisted of regular walls with brick floorings and pavements.[132] Other material objects discovered from the Kuṣāṇa level consisted of typical Kuṣāṇa terracotta figurines, Kuṣāṇa coins, seals, sealings, beads, etc.[133] In sharp contrast the only notable Gupta structure exposed from Period IV (*c.* 4th to 6th centuries A.D.) is the remains of two mud platforms.[134] On the whole this period yielded poor structural remains, mostly rebuilt with the brickbats of the earlier period and it was not possible to determine the details and plans of the structures.[135] Other antiquities of the period too do not

compare favourably with those of the Kuṣāṇa period. Moreover, after Period VI the site seems to have been abandoned, for not even a single post-Gupta antiquity has been reported.[136] This suggests that the site which started decaying from the post-Kuṣāṇa times was completely abandoned during the post-Gupta period.

Sohagaura, in the district of Gorakhpur, has also revealed four cultural phases Period III, distinguished by the disuse of the NBP, yielded pottery with stamped symbols like *triratna* as in Hastināpura IV, ring-wells, a terracotta figurine with Śunga headdress and another with foreign features, and Ayodhya, Pañchāla and Kuṣāṇa coins, including a unique coin of a hitherto unknown ruler Hathadeva. A brick structure standing to a height of ten brick-courses has also been exposed.[137] The site has not yielded even a single Gupta antiquity and Period IV of Sohagaura belongs to the medieval period. This might suggest that the site was abandoned immediately after the Kuṣānas, remained uninhabited during the succeeding period and came to be reoccupied in the medieval period.

Kasia, identified with the important ancient Indian urban centre Kuśinagrara, also seems to have fallen on bad days in the post-Kuṣāṇa period. Although the limited archaeological excavations carried out at this site are virtually useless stratigraphically, the accounts of Chinese pilgrims make the situation crystal clear. Fa-hsien, who visited this city, records that in the city the inhabitants were few and scattered and only those connected with priesthood were staying there.[138] This situation is further corroborated by the accounts of Hsuan-Tsang. He writes that the city-walls of the country Kuśinagara (*Kou-shih-na-ka-lo*) were in ruins, and the towns and villages were deserted. He adds that the brick foundations of the "old city" (that is, the capital city) were ten *li* in circuit, but there were very few inhabitants and the interior of the city was a wild waste.[139] He also refers to the ruins of Buddhist religious structures.[140] Thus, the combined evidence of Fa-hsien and Hsuan-Tsang leaves no doubt as to the decline of Kuśinagara in the Gupta and post-Gupta times.

The pattern of desolation and desertion of urban sites is also repeated in Bihar. Thus, Chirand, in the district of Saran, which was a flourishing urban centre during the Kuṣāṇa period,

was deserted in the post-Kuṣāṇa times and it was reoccupied only during the "Muslim" period. Its Period III (*c.* 100 B.C.-A.D. 250),[141] covering the Kuṣāṇa phase, is very rich in structural activities. The structures, being mostly of burnt bricks, among others consisted of Buddhist monasteries with provision of a verandah in front of the cells,[142] and a large structure of a residential type in which one of the blocks contained two small rooms with a drain running through their floors into a cistern outside the main building; these rooms were possibly bathrooms or privies.[143] Further excavations also exposed a square chamber, probably of a shrine built of thick walls and an equally massive boundary-wall.[144] While the first excavation revealed three constructional phases,[145] a later excavation exposed five phases,[146] but interestingly the 1963-64 excavations revealed that the last two phases were shoddy, mostly rebuilt with the brickbats of earlier structures.[147] This may suggest that the decline had started towards the end of the Kuṣāṇa period itself. In fact, together with structural remains, the site has yielded immensely rich materials belonging to the Kuṣāṇa period,[148] whereas Gupta structures and antiquities are negligible. It seems that the prosperity of this city started diminishing from towards the end of the Kuṣāṇa period, it drastically decayed under the Guptas, it was abandoned in the post-Gupta period, and came to be reoccupied only with the beginning of the Muslim rule.

As regards Vaiśālī (modern Basarh), in the district of Vaiśālī, a somewhat similar situation can be noticed. Successive excavations at this site have brought to light rich Kuṣāṇa materials including structural remains; the Gupta phase too is well represented but comparatively it is poor in material remains. The period (*c.* A.D. 100-300), representing the Kuṣāṇa phase, has extensive brick buildings and one of the walls was traced to a length of 77 feet.[149] In comparison with this the Gupta phase exposed a 57 feet wall running north-south with rooms of varying dimensions attached to it. The building represented by them probably had a roof of tiles, fragments of which were noticed in the debris.[150] Although structural remains of the Gupta period are in no way numerically inferior than the early period, qualitatively they certainly do not compare favourably with the Kuṣāṇa structures. The

Gupta structures are, in fact, made of broken and reused bricks.[151] Find-wise the Gupta phase shows distinct signs of inferiority. Thus, not even a single Gupta coin has been discovered from this site. The excavators suggest that this perhaps "reflects the negligence of the Gupta officials in this region" or the weakening of "the administrative hold of the Guptas over Vaiśālī".[152] To us it seems that it probably indicates the waning of the economic/commercial importance of this place in the post-Kuṣāṇa times. The unmistakable impression one gets is that although this city remained occupied and formed one of the district headquarters under the Guptas,. it lost its earlier economic importance as well as prosperity. That Vaiśālī even seems to be abandoned for a considerable period of time in the post-Gupta period is indicated by the occurrence of pre-Mughal glazed ware in the subsequent phase (post-A.D. 600).[153] This archaeological evidence indicating the post-Gupta desertion of the city is also corroborated by the accounts of Hsuan-Tsang. He records that the capital city of Vaiśālī was to a great extent in ruins and the royal precincts, which was about 4 to 5 *li* in circuit, had only a few people living in it. North-west of the royal city was a *saṅghārāma* with only a few disciples.[154] Describing the general condition of the Buddhist establishments throughout the kingdom, he observes that out of several hundred Buddhist monasteries only three or five were at that time inhabitable and there too only very few priests were residing.[155] He further adds, "Both within and without the city of Vaiśālī, and all round it, the sacred vestiges are so numerous that it would be difficult to recount them all. At every step commanding sites and old foundations are seen, which the succession of seasons and lapse of years have entirely destroyed. The forests are uprooted; the shallow lakes are dried up and stinking; nought but offensive remnants of decay can be recorded."[156] That the whole region was declining is suggested by the fact that the Chinese pilgrim saw the ruins of another city some 200 *li* north-west of the city of Vaiśālī.[157] Thus, both the archaeological excavations and the accounts of Hsuan-Tsang are unanimous regarding the decline and virtual desolation of the city of Vaiśālī in the post-Gupta period.

Excavations at Champā, the ancient city site in modern Bhagalpur district, also reveal the desertion of this site in the

post-Gupta period. At this site three cultural periods were recognised. Period I subdivided into three phases and covering the period from *c.* 200 B.C. to A.D. 300 yielded numerous objects including a fortification system, various types of wares, terracotta figurines, beads and iron and copper objects.[158] The Gupta phase represented by Period II at the site also yielded relics including terracotta human and animal figurines, terracotta skin rubbers, antimony rods and beads, but structurally this was an inferior phase. It was dominated by a shoddy wall of brickbats, besides other structures of the same type. Moreover, Period III was mainly represented by a dump of loose soil, at the basal level of which some glazed sherds of the "medieval" period were found together with a coin of Queen Victoria.[159] The evidence clearly suggests that the city started decling from the Gupta period and came to be virtually deserted in the post-Gupta times. Hsuan-Tsang, who visited Champā, also noticed that although there were several tens of *sadghārāmas*, they were mostly in ruins.[160] Both the evidences together may be taken to suggest the decline and desolation of Champā in post-Gupta times.

At Charittarvan (Buxar), in the district of Sahabab, the Kuṣāṇa phase is followed by a break. Although the NBP phase at Buxar represented by Period II shows better signs of habitation, the relics of the period covering the post-Maurya hase represented by Period III are not too unimpressive. Period III showed the use of ceramics of the early Christian era represented in such forms as the sprinkler, carinated and flanged *handi*, spouted vase, together with terracotta human figurines having typical Kuṣāṇa headdresses, sealings, beads and iron objects. A long wall, measuring 6 metres in length, perhaps part of a large hall, was also exposed. The site has so far failed to yield even a single Gupta relic or structure and its Period III was followed by a long break and it came to be reoccupied in medieval period represented by Period IV at the site.[161] Thus, the excavated material suggests that the site went out of occupation in the late Gupta and post-Gupta times for a long time and came to be reoccupied by the people using the medieval glazed ware.

At Kumrahar (Pāṭaliputra, modern Patna) too archaeological evidence suggests poor habitation in the Gupta period and

the abandonment of the city in the post-Gupta period. Almost every excavation conducted at Kumrahar and its vicinity suggests that decline set in here in late Gupta times and became very marked in the post-Gupta times.[162] These excavations make it clear that the Maurya and post-Maurya phases up to A.D. 300 are well represented, while the period from A.D. 300 to 600 betrays signs of decline. While Spooner in 1913-14 noted several instances of remains of Gupta structures sagging downwards,[163] the evcavations of 1951-55 exposed a structure, belonging to the period A.D. 300-450, which was in a dilapidated condition made of mainly brickbats.[164] Although the stratum covering A.D. 450-600 has yielded red ware of worse fabric and a few inscribed sherds in the Gupta character, the other antiquities of the Gupta period are wanting.[165] Kumrahar is, however, very rich in Kuṣāṇa brick-structures and antiquities.[166] Although the monastic structures are assigned to a long period (150 B.C.-A.D. 600) and the area seems to have been continuously inhabited from the Maurya period to about A.D. 600,[167] most of the structures apparently belong to pre-Gupta and early Gupta times. A later excavation, which recognised three habitational phases, indicates that while the first two phases (600-150 B.C. and 150 B.C.-A.D. 500) were continuous, the third followed after a long habitational break.[168] This suggests that the city, which remained occupied up to the Gupta period, was abandoned in the post-Gupta times to be reoccupied only in the 17th century A.D. When Hsuan-Tsang visited this area, he found the city long deserted.[169] He further records that only the remains of the old foundation walls of the city exist. "The *saṅghārāmas*, *Deva* temples, and *stūpas* which lie in ruins may be counted by hundreds. There are only two or three remaining."[170] It seems that by the time Hsuan-Tsang came to Pāṭaliputra the city had been completely ruined and deserted.

As far as the city of Rājagṛha, in the district of Nalanda, is concerned, much cannot be said because of the haphazard nature of excavations. It can, however, be suggested that the city was deserted in the post-Gupta period. Various excavations carried out at this site failed to expose any post-Gupta structure. Only the Maniyār-Maṭh shows signs of enlargement in the late Gupta period.[171] Even recent excavation carried by

A. Ghosh suggesting a sequence of four periods ranging from pre-500 B.C. to 1st century A.D.[172] failed to unearth any Gupta relic. Hsuan-Tsang too suggests that the city was ruined in the post-Gupta times. Visiting this area, he observes, "The outer walls of this city have been destroyed, and there are no remnants of them left . . ."[173] He further notices that the inner city was in a ruined state[174] and a village nearby was apparently deserted.[175] Thus the combined testimony of archaeology and Hsuan-Tsang's impressions suggests that the city was certainly in a state of decline in the post-Gupta period.

Sonpur, in the district of Gaya, also seems to have been deserted after the period of Kuṣāṇa occupation. The site remained under occupation from *c.* 1100 B.C. to A.D. 200, The Kuṣāṇa phase, represented by Period III (200 B.C.-A.D. 200), was the most prosperous period of the site.[176] Burnt-brick structures encountered at the upper level of this period are dated to A.D. 200. Although on account of the limited nature of excavations no complete plan of any structure was exposed, the period yielded iron objects, terracotta figurines, nails, knife-blade, lances, axes, daggers, antimony rods, bone and ivory objects, etc., together with copper punch-marked and cast coins.[177] More signs of habitation are noticed in the Kuṣāṇa phase than in the earlier phases, while not even a single post-Kuṣāṇa antiquity has been reported.[178] In fact, the Sonpur site was practically abandoned immediately after *c.* A.D. 200.[179]

A similar history of habitational pattern can be noticed at the *Asura* site at Saradkel in Ranchi district. Excavation revealed two occupational phases. Period II was marked by an intense building activity. A massive defence-wall built of baked bricks having a height of fourteen courses of bricks at some places was exposed. The houses of the period—generally made of burnt-bricks—were oriented roughly along the cardinal directions. The floors were often made of brickbats together with floors of full-sized bricks. One of the rooms yielded a stone anvil which might have been used for beating iron slag. The ceramic assemblage of such typical forms as the ledged lid, flat-based bowl, sprinkler, combined with incised decorated designs, strongly suggests a Kuṣāṇa complex. Other associated finds not only confirm this identification but also indicate the high

prosperity of the site.[180] The site seems to have been completely abandoned and deserted after 2nd century A.D.[181]

This pattern of decline and desertion can be noticed in areas like Sisupalgarh too. This ancient town of Orissa seems to have gone out of occupation in the post-A.D. 300 period. At this site three cultural phases were recognised, of which Period I (300-200 B.C.) was the formative stage. While early Period II A (200 B.C.-A.D. 100) marked the full cultural efflorescence characterised by the occurrence of 'rouletted' ware, the late Period II B (A.D. 100-200) shows signs of decline and transition. During Period III (A.D. 200-300) the ceremic industry as well as the structural layout changed considerably[182] and no structures or antiquities going beyond this date were noticed at Sisupalgarh which implies that the site came to be deserted some time in the 4th century A.D.

The decline of urban centres in the post-Kuṣāṇā period was not confined to northern and eastern India, western India and the Deccan also repeat this development. Thus, Jaderna, in the district of Gwalior, seems to have gone out of occupation for a considerable period of time after the second century A.D. Three cultural phases were recognised at this site. The site, which came to be inhabited in Period I (*c.* 6th-5th century B.C.), was reoccupied after a small gap in Period II A (*c.* mid-4th-2nd century B.C.). The succeeding phase, Period II B (*c.* 1st century B.C.-2nd century A.D.), which is remarkable for rich finds in the form of coins and terracottas, seems to have been followed by a long gap of about 700 years, after which the city came to be reoccupied in Period III (*c* 9th-10th century A.D.);[183] not even a single antiquity of this intervening period has been reported. Thus, Jaderna, which remained in continuous occupation from *c.* 6th century B.C. to 2nd century A.D., was deserted towards the beginning of the 3rd century A.D.

Excavations at Kayatha, in the district of Ujjain, indicate that this site also declined in the post-Gupta times. The site which seems to have remained in occupation from pre-historic times had five habitational phases. Period IV characterised by Śunga terracottas and cast copper coins was followed by the Gupta phase (Period V), which showed signs of building activity but yielded no coins at all.[184] The post-Gupta antiquities, other than two coins of Muhammad Shah in the upper layers,[185] are

conspicuously absent from the site, suggesting the abandonment of the site in post-Gupta times.

In the Deccan too a similar development can be noticed. Thus, Period VI (A.D. 100-500) at Maheshwar and Navadatoli was followed by a long habitational gap and the site came to be reoccupied in the "Muslim" period. This suggests the complete desertion of this centre in the post-Gupta times.[186] Similarly Period V (50 B.C.-A.D. 200) at Nevasa was followed by Period VI covering the span from A.D. 1400 to 1700.[187] Thus, this site too was certainly abandoned some time in the 3rd century A.D. and came to be reoccupied after 1200 years. At Brahmapuri (Kolhapur) too the habitation ended in the post-Sātavāhana period (200 B.C.-A.D. 200) and the site was reoccupied only under the Bahamanis.[188] Excavations at other sites like Nasik and Jorwe,[189] Devnimori,[190] Shamalaji,[191] Ter,[192] etc., also suggest that these sites started decaying in the 3rd-5th centuries of the Christian era.

This general picture of decline and desertion had, of course, certain exceptions. Take, for instance, the city of Kanauj. All the available evidences suggest that it was certainly a flourishing urban centre even in the post-Gupta times. In contrast to his description of most of the ancient urban centres of this area. Hsuan-Tsang has the following to say about the country of Kanauj (*Ka-no-khü-she*): "...it was very strongly defended and had lofty structures everywhere; there were beautiful gardens and tanks of clear water, and in it rarities from strange lands were collected. The inhabitants were well off and there were families with great wealth...The people had a refined appearance and dressed in glossy silk attire... There were about 100 Buddhist monasteries with more than 100,000 Brethren...There were more than 200 Deva-Temples and the non-Buddhists were several thousands in number."[193] This clearly suggests that Kanauj was a well-populated and prosperous urban centre.

Kashipur, in the district of Nainital, is another typical site of this type. A massive temple exposed at this site indicates that beginning from the early Gupta period, the site continued to flourish till the 8th century A.D.[194] In fact, no evidence has come to light so far to indicate the period when the importance of the temple declined. The indications are that even when the structure had deteriorated, the site continued to be held in sanctity

till 14th century A.D. or thereafter.[195] An image of Trivikrama assigned to 13th century[196] and another of Gaṇeśa belonging to 13th-14th centuries[197] strengthens this contention. The pottery[198] and terracottas[199] discovered from this site also suggest this occupational phase.

Nālandā and Vikramaśilā in Bihar also present a similar picture. Both of them continued to be important educational centres in the early medieval period. Balirajgarh, in Madhubani district, presents a similar picture of continuity. Excavation carried out at this site was limited in nature and was confined to exposing the fortification system. Three phases of construction including repairs were recognised. The earliest phase consisted of a mud-brick core with battered brick rivetments. In the second phase, a brick-concrete ramp was built against the inner face. The third phase witnessed further reinforcement of the ramp in the shape of a 3-metre high platform, built against the inner face of the fortifications. From the pre-defence deposits, sherds of the NBP were found. The fortifications seem to have been built some time in the second century B.C. and rrmained in use till the Pāla period.[200] This suggests that the site was hardly affected by the Gupta and post-Gupta developments taking place in other areas; the site remained in continuous occupation from *c.* 2nd century B.C. up to the Pāla period and might have continued to be inhabited thereafter too.

As one moves further eastward towards Bengal, the Balirajgarh pattern becomes very common. In this area, one hardly notices the decline or desertion of any site in post-A.D. 300 or post-Gupta period. Thus at Banagarh, in the district of Dinajpur, five phases, dating from the Maurya to the "early medieval" period, were recognised. Period III, covering the Kuṣāṇa and Gupta times, shows various impressed decorative designs. During this period and Period IV, when the Pālas had appeared on the scene, the rampart wall was raised higher. A small but unique lotus-shaped tank, originally covered with a pillared canopy, belongs to Period IV. With the tank at the centre, the primary plan of the buildings to which it pertains is cruciform, a chamber on each corner communicating with the tank. Other relics of the period include stone sculptures and carved bricks. The post-Pāla period represented by Period V, however, seems to be

poor in content, for no buildings were encountered in this period.[201] Thus, the site seems to be in a flourishing condition up to the Pāla period, after which possibly decline set in.

The excavations at the site of Khana-Mihirer-dhipi at Chandraketugarh, situated at a distance of 23 miles to the north-east of Calcutta, revealed a similar occupational sequence. The phase covering the period from *c.* 3rd to 6th century A.D. was perhaps the most flourishing period of the site,[202] but the Pāla period too has abundant signs of prosperous habitation. Thus, the upper part of a massive wall built during the earlier period was renovated with rubbed bricks.[203] The construction of a rough and massive brick structure covering a building of the earlier period, with its foundation starting at a lower level, was also exposed.[204] Another important structural discovery was a small brick temple, 5.94 metres square, with a central square pit showing descending offsets to a paved floor, 40 centimetres square in area.[205] Other Pāla relics discovered from the site make it certain that it was a well-developed urban centre under the Pālas. In fact, remains of post-Pāla structures have also been noticed, but they are too few[206] to suggest any meaningful habitation.

Excavations at Rajbadidanga, in the district of Murshidabad, suggest the flourishing condition of the site in the post-Gupta period. Three post-Gupta layers, Phases IV, V & VI, have been recognised. To Phases IV and V belonged an oblong temple-complex with the *ardhachandra* entrance-platform, walls, brickbat platforms covered with *surkhi*-ramming lime plaster, etc.[207] Even the main *triratha* temple, *mandapa,* square shrines and the compound-wall providing a *panchāyatana* temple-complex, built during the Gupta period, were quite in use during Phase IV too. In Phase V, all these structures were covered by a *surkhi*-rammed platform, remains of which were in alignment with a square shrine on the north-western corner.[208] Another part of the site exposed walls, floors, ovens, corridors, rooms, etc , belonging to Phases II, III and IV.[209] Structural remains of Phase VI consisted of walls, floors and brickbat platforms.[210] These structural activities together with numerous relics coming from this site suggest that the site was under occupation till the 10th-11th century A.D.[211]

At Goswamikhanda, in the district of Burdwan, a massive

structure of laterite blocks, showing different phases of repairs, was laid bare. Initially the platform, measuring 8.40 metres × 6.25 metres, was built on a hard bed of cemented laterite nodules. Immediately over it was exposed an extensive floor of beaten pellety laterite with signs of large potholes. Thereafter, a small platform was added in the east and a group of four square pillars with slightly tapering bases were found lying between the two platforms. In the last structural phase another floor of dark-grey laterite nodules was made above the earlier floor and the uppermost construction revealed iron dowels at some places beneath the debris of laterite rubble mixed up with fragments of brāhmaṇical images assignable to about the 10th century A.D. The last phase also yielded pottery like terracotta conical cups, vases with outcurved and undercut rims and grooves at the neck, and lids with inner grooves.[212] Thus the site certainly remained in occupation up to the 10th century A.D. Similarly, excavation of Nanur, in the district of Birbhum, revealed that the site had been in occupation from protohistoric through historical including "medieval", to modern times.[213] Thus, most of the sites in eastern India seem to have remained in occupation, at least, up to the days of the Pālas, after which some of them betray signs of decay.

Two sites of this part of the country, however, conform to the pattern of decline and desertion noticed in other parts of the country. Thus, at Tāmralipti Period IV, covering the Kuṣāna and Gupta times, shows better signs of habitation than during the post-Gupta times, represented by Period V. While Period IV has yielded typical Gupta terracottas along with other relics, only pieces of sculptures are forthcoming from the Pāla and Sena times.[214] Although the site seems to have remained in occupation even during the Gupta period, its prosperity certainly declined, a fact also attested to by Hsuan-Tsang's description of this place. The Chinese pilgrim fails to note any mercantile and commercial activity of this place[215] implying a general loss of trade in this area and subsequent undermining of the importance of this city. Another site Pandu-rajar-dhibi, in the district of Burdwan, has not yielded any significant post-NBP relics to this day,[216] suggesting the abandonment of this site in the early centuries of the Christian era.

The above survey demonstrates that while most of the towns of the Gandhāra region, Kashmir, the Punjab, Haryana, Delhi, Rajasthan, H.P., U.P. and Bihar, which thrived during the Kuṣāṇa period, either completely decayed or started showing signs of decline in the post-Kuṣāṇa period, the towns of northernmost Bihar (Balirajgarh) and Bengal continued to thrive. The latter group of towns flourished especially during the period of Pāla supremacy. To this list of towns can be added Mudgagiri,[217] Rāmāvatī[218] (near modern Gaura in the Malda district), Vaṭaparvataka (modern Vateśvara-parvata near Patharghota in the Bhagalpur district), Vilāsapura or Haradhāma,[219] Sāhasagaṇḍa,[220] Kāñchanapura[221] and Kapilavāsaka[222] (the last four being unidentified), which are mentioned as the Pāla *jayaskandhavāras*. Although these were not permanent urban settlements, they were certainly camp towns. The existence of towns under the Pālas, on the one hand, and the decline of towns in a major part of India in the Gupta and post-Gupta times, on the other, raises a dichotomy which can be resolved only by analysing the factors responsible for the decline of the latter group of towns and, at the same time, the reasons for the continuation of the former group of urban settlements under the Pālas.

The decline of urban centres, like their growth, is caused by a variety of factors. Cities grow because of certain causative factors and if these causative factors disappear from the scene the city loses its rationale and is bound to decline. Thus, in a way the same set of causes/cause, which was responsible for the acceleration of urban process in the earlier periods,[223] accounted for the decline and at times, even disappearance of urban centres in the Gupta and post-Gupta times. The basic causes responsible for deurbanisation were economic, social, religious and political. To this list some of the specific causes like foreign invasions, feudal wars and the sacking of cities, natural calamities like floods and famine, shifting of river's stream on which a town is located, deforestation and its impact on environment, etc., may also be added. The causes responsible for the decline of cities towards the end of our period may be broadly categorised under the following heads :

(1) Natural and Geographical,

(2) Political,
(3) Foreign Invasion,
(4) Feudal Wars and Sacking of Cities,
(5) Religious,
(6) Economic.

(1) Natural and Geographical Causes

The literary texts of ancient India contain numerous references to natural and geographical calamities like famine, floods, epidemic, etc. This might have led not only to the shifting of population from one place to another thereby leading to the decay of urban settlements, but also must have adversely affected the urban settlements by turning their erstwhile advantageous geographical location into a distinct disadvantage mainly as a result of the changing course of the river. Although Megasthenes suggested that India was not prone to famine, Kauṭilya's *Arthaśāstra* and a host of other indigenous literary texts give us an altogether different picture. Thus, the *Yuga Purāṇa* refers to a terrible famine which lasted for 12 years.[224] From the account of this famine, it becomes apparent that the most severe impact of this famine was felt in the plains of the Ganga valley—a region whose agrarian economy was basically dependent on monsoon and which provided subsistence to a large number of towns. The *ākhyāyana* portion of the *Mahābhārata* refers to a famine which extended to many years.[225] The famine in Kuru during Samvaran's reign was of 12 years' duration and it was so devastating that even trees were destroyed and animals killed, and the capital looked like a city of ghosts.[226] The most graphic and tragic famine was, however, the one in which lakes, wells and springs dried up and agriculture and domestication of animals became impossible. Markets and shops were abandoned, while cities were deserted and hamlets burnt down. The brāhmanas died unprotected. People fled from fear of one another, or of weapons, or robbers, or kings, and animals were virtually completely annihilated. Herbs and plants withered away, and men bereft of senses due to hunger began to eat one another.[227]

The early Buddhist texts also contain numerous references to famine in different regions such as Vaiśālī, Rājagṛha, etc.[228]

The *Divyavadāna* makes a detailed analysis of famines and refers to three types of this natural calamity—*chanchu*, *svetāsthi* and *salākavrithi*. During the first one, people survived on grains which were collected in a box for appeasing the dead. During the second type of famine, which was relatively more severe, people prepared bone-soup and drank it. During the third type of famine, which was apparently the worst of the three, grains and molasses stuck up in holes were taken out with the help of sticks, were boiled with large quantity of water and the soup thus prepared formed the basis of sustenance of the famine-stricken people.[229] Another Buddhist text vividly brings out the severity of famines when it says that sometimes during famines people were forced to eat even the flesh of their children.[230] That these famines seriously affected the fate of urban centres is clearly suggested by the literary sources. Attempts have also been made to corroborate these literary references by archaeological excavations. Some of the excavated urban sites cetainly betray signs of the effect of famine, so frequently recorded in our ancient texts.[231] The suggested period of this famine is quite anterior to the actual decline of towns in the Gupta and post-Gupta periods, and the effect of this famine, according to this suggestion, is characterised by signs of temporary decline or desertion at some urban sites in the post-Maurya phase.[232] This, however, indicates that references to famines in contemporary literature are not hypothetical, but they record actual events. Moreover, the Mahasthan and Piprahwa vase inscriptions also refer to famines.

The contemporary literature also records instances of other natural calamities like pestilence, fire, plague, etc. The *Arthaśāstra*, the epics, the Buddhist literature and the *Dharmaśāstras* specifically refer to these calamities.[233] The *Yuga Purāṇa* says that the 12 years' famine was followed by a pestilence.[234] The *Jātakas* also refer to pestilence along with the devastating impact of fire, storm and plunder, and to the destruction of towns.[235] The *Gijjhā-Jātaka* even refers to a city destroyed by vultures.[236] Another Buddhist text, the *Mahāvastu*, records that even plagues destroyed settlements. It also refers to two types of diseases caused by demoniac agency—*maṇḍālaka* and *adhivāsa*. While the *maṇḍālaka* plague left no one alive in a family, the *adhivāsa* plague killed every living being of the district.

The same text records that the city of Vaiśālī was once infested with the *adhivāsa* type of plague killing many persons.[237] Cities like Kampilla, Mithilā, Videha and Rājagṛha also seem to have suffered a similar fate.[238] That earthquakes too might have played a crucial role in the context of the decline of the settlement affected by it, cannot be ruled out.[239] Although archaeology cannot corroborate these literary pronouncements, it can be presumed that calamities like pestilence and plague must have reduced the urban population, if it did not lead to their complete desertion. This was bound to undermine the prosperity and continuity of the affected urban settlements. The instances of temporary breaks in occupation forthcoming from various sites might indicate the possible impact of such natural calamities.[240]

References to natural calamities are found in large numbers in the *Bṛhat-Saṁhitā* of Varāhamihira. This work roughly represents the period in which decline of urban centres was assuming phenomenal proportions. This text makes 52 forecasts of bad harvests owing to insects, wild beasts, birds, mice, excessive rain, etc.[241] This is followed by 42 forecasts of bad conditions, etc., due to diseases, want of food, etc.[242] Similarly, while there is only one forecast of prosperous condition of cultivators,[243] there are seven forecasts of their bad times.[244] The text also makes four forecasts of decline of population,[245] five of scarcity of food, etc.,[246] two of the suffering of citizens at the hands of their own king,[247] etc. There are altogether 42 forecasts of famine,[248] 32 of drought and scarcity of rain,[249] 11 of heavy rainfall and flood,[250] five of earthquakes,[251] nine of fire[252] two of thunder-strokes,[253] four of whirlwinds and storms,[254] 14 of pestilence,[255] 35 of diseases and sickness,[256] and two of plagues.[257] These numerous references to various natural calamities affecting the settlements in more than one way during the Gupta period might suggest that some actual instances of this type might have adversely affected the urban settlements during this phase of urban decline.

Although all these literary causes responsible for the decline of settlements cannot be corroborated by archaeological evidence, the ravages of floods are clearly noticeable at a number of sites.[258] To begin with, the site of Saikhan Dheri can be cited as an instance. Here the habitation shrank considerably

obviously because of floods during the latest phase of occupation. In some of the cuttings in western section of the site, thick deposits of alluvial clay and sand were noticed implying thereby the entry of flood waters up to that point. The floods ravaging Saikhan Dheri seem to be so recurrent and devastating that the entire population had to shift to a new city site, Rajar, during the reign of Vāsudeva I. This led to the complete abandonment of Saikhan Dheri towards the end of the 2nd or beginning of the 3rd century A.D.[259] That precautions against floods were also taken at certain other sites of the area, like Sirkap, cannot be ruled out. The excavated gateway of the northern side was planned in such a way that during floods the water pouring down the main street would expend its force to some extent against the city-wall before entering the capacious underground drain which passed through south to north beneath the gateway.[260] Although devastations due to floods have not been noticed at this site, the recurrent possibility of floods threatening the city becomes obvious from its planning.

The evidence of floods affecting adversely the urban settlements of the Punjab and Haryana is not copious, but even the limited evidence suggests that the rivers did affect the urban centres by changing their courses. Thus, at Sanghol erosion marks were clearly noticeable on the sloping sides of the two major moats of the defence complex (assigned to the period beginning from second half of the 1st century A.D. to the 5th century A.D.), while those of the third are sharply maintained with a horizontal base.[261] This clearly indicates that floods might have adversely affected the habitation at Sanghol and helped the process of decline.

The evidence of floods is forthcoming from many sites of Uttar Pradesh. Hastināpura has clear signs of floods devastating the whole site. The excavator suggests that during Period II (*c.* 1100-800 B.C.) the whole settlement was washed away by a flood in the Ganga.[262] This is, no doubt, an earlier evidence but this might have happened in the early centuries of the Christian era also. The complete abandonment of this site towards the end of the 3rd century A.D. for about 800 years[263] might have something to do with floods, though the excavator does not give any reason for this desertion. Moreover, at present the river Ganga flows at a distance of about five miles to

the east from the excavated site. Within a mile in the same direction can be seen another streamlet, sluggish yet perennial, called the Būḍhī Ganga—a fact indicating that in ancient times the main river itself was flowing much nearer the site.[261] This indicates that the course of the river changed in due course which might have given yet another setback to this urban settlement as the city must have lost its commercial significance of being located on the banks of a river.

Floods also seem to have affected the city of Atranjikhera. A flood seems to have washed away a considerable portion of the PGW habitation during its last phase. Again the pre-structural NBP phase also seems to have been brought to an end by a flood, causing a heavy loss.[265] That floods might have devastated this site during the succeeding periods too cannot be ruled out especially in the light of the above evidences. Similarly, the ancient city of Śrāvastī too might have been destroyed by floods of the river Rapti.[266] A Pāli legend referring to 18 crores of money hoarded on the banks of Achirāvati by a rich merchant of Śrāvastī, Anāthapiṇḍika, being swept away by floods in that river,[267] is an indication of this eventuality. This legend apparently suggests that the city of Śrāvastī had to face the ravages of floods which not only destroyed considerable part of the city, but also swept away its wealth. A city can hardly hold itself against such recurrent devastations.

Evidence of the flooding of the site is not forthcoming from other sites of Uttar Pradesh, but it can be suggested that some of the more important ancient urban centres of this area, like Kauśāmbī, Bhīṭā, Rājghāt, etc., being situated on river banks might have been susceptible to the vagaries of the river. They possibly were not only affected by the floods, but the changing course of the river too might have forced changes in the occupational pattern. The erosion of a moat at Kauśāmbī as a result of the annual inundation of the Yamuna[268] lends credence to our suggestion. A relatively unimportant site of Takiaper too witnessed a break in occupation, but the excavator tells us neither about the period nor the cause of this break.[269]

The evidence of flood at some of the sites of Bihar is, however, more explicit. Anyone visiting the site of Chirand can see for himself that a large area of the present mound seems to have been continually eroded by the river Ghaghara. Moreover, the

fact that a large number of antiquities have been picked up from the river-bed, suggests a continuous erosion of the site. This might indicate that the settlement at Chirand possibly came to be abandoned because of the continuous erosion of the habitational area of this city.

At Vaiśālī too one comes across certain distinct instances of the flooding of the site. To begin with, the 1960-61 excavation revealed a unique evidence from the area of Bania. The structures of Period II, representing the Kuṣāṇa-Gupta phase, were sealed by a sterile, yellowish, compact earth, probably a flood deposit. From the overlying humus a few sherds of the "Muslim" glazed ware were picked up.[270] This evidence clearly suggests that the site was destroyed by floods some time during the Gupta period and it was abandoned. The discovery of "Muslim" glazed ware from the overlying humus implying the rehabitation of this site after a long period corroborates this hypothesis. Similarly, frequent changes in the river-beds[271] might have further aggravated the situation and apparently led to the desertion of this city.

Excavations at Charittarvan (Buxar) also indicate the devastating impact of floods. The site seems to have been inundated some time after Period II by the Ganga water which completely washed away a major portion of the habitational area. The impact of the inundation was such that the site was soon abandoned leading to the complete disappearance of this erstwhile flourishing urban centre.[272]

The crucial role of floods in the destruction of the city of Pāṭaliputra is explicitly referred to in many of the literary texts and is confirmed by archaeological evidence also. While passing through the village of Pāṭaligāma, the forerunner of the city of Pāṭliputra, the Buddha is said to have prophesied that "among all famous places where the Āryans reside, among all trade-routes (*Vanipattho*), this Pāṭaliputra will become the *puṭabhedana* (a city where all kinds of wares are weighed and interchanged) and the *aggaṇagara* (the chief city). But there shall be three dangers to Pāṭaliputra, that of fire, that of water and that of dissension."[273] Of these three dangers, the destructions brought about by fire and floods are also supported by archaelogical evidence.

The ancient city of Pāṭaliputra because of its geographical

location was very much susceptible to the vagaries of floods. It was surrounded by four important rivers, the Ganga, Sone, Punpun and Gandak.[274] The city seems to have been destroyed by some devastating flood of the Sone in the second half of the 6th century A.D. A late Jaina text, *Titthogali Painniya,* refers to this terrific and unprecedented flood of the Sone in the month of *Bhādrapada* (September). It has been said that king Chaturmukha Kakli was persecuting the Jainas and their preceptor advised them to leave Pāṭaliputra, and predicted that there would be several catastrophes in the future. A number of Jaina monks, who are said to have understood the hint, left the place, but some of them remained at this place. Very soon it started raining heavily and continuously for 17 days and nights. The water-level of Ganga rose, as also that of the Sone. The latter was terrific in its current and engulfed the whole of Patna. The current of the stream was so swift that several monks and laymen were carried off by it. Only those getting the support of rafts or boats could save themselves.[275] The graphic account of Hsuan-Tsang about the desolation and destruction of the city also suggests that the city had been badly ravaged by floods causing a large-scale devastation of the buildings and property.

Excavations carried out at this site also suggest that Pāṭaliputra was constantly visited by floods. In the course of excavations at Kumrahar during 1912-13, about 8 to 10 feet deep silt and a thick layer of ashes were discovered at the site of the 80-pillared hall, which clearly indicate that the destruction of the hall had a lot to do with floods also; Spooner, however, failed to ascertain the duration or time of its occurrence.[276] Waddell too suggests that the place may have been destroyed by floods.[277] Moreover, besides the sand and mud of Sone in southern suburbs of Patna, that of the river Punpun too was found at Kumarhar during the 1951-55 excavations; this deposition was certainly due to the flood of this river,[278] a fact which might indicate ancient Patna's susceptibility to floods.

There is another account of Pāṭaliputra's complete destruction around A.D. 750. Cunningham on the basis of a Chinese account suggests that in c. A.D. 756 the bank of a river called "Ho-lung" (the Ganga or the Sone) gave way and disappeared.[279] He thinks that this account refers to Pāṭaliputra, "as the

only other city on the immediate bank of the Ganga is Benares, where such an event is much less likely to have happened."[280] This incident possibly refers to the destruction of this city for the second time. The river bank probably gave way on account of flood and not earthquake as has been suggested.[281] This is obvious from the fact that while excavations have brought to light signs of fire and flood at this site, there is nothing to suggest that it was ever affected by an earthquake.[282]

The evidence of floods can also be noticed at Balirajgarh. The third phase of habitation at this site witnessed reinforcement of the ramp of the fortification system in the shape of a 3-metre high platform of earth mixed with potsherds, built against the inner face of the fortifications. The excavators specifically mention that the reinforcements were necessitated by heavy floods as evidenced by silt-deposits.[283] In the second phase too, probably representing the Kuṣāṇa period, a brick-concrete ramp had been built against the inner face.[284] This might have been done to check the floods of river Kamala. The evidences, therefore, make it clear that the site of Balirajgarh was constantly threatened by the ravages of floods and this might have led to the gradual decline of this settlement in the post-Gupta and Pāla times.

Excavations at Rajbadidanga also suggest the disturbance of the site due to floods. During one of the excavations in the area towards the western end, a long massive wall was fully exposed. This excavated area, however, contained clear evidence of whitish silt-deposit obviously left by inundation. This area had structures covering the period beginning from the early centuries of the Christian era to the 7th-8th centuries A.D.[285] It seems that some time during this period the site was badly ravaged by the floods and this must have adversely affected not only the habitation but also the general prosperity of the settlement.

The above discussion makes it obvious that floods did play a crucial role in the decline and decay of certain urban centres. While in the case of towns like Saikhan Dheri, Hastināpura, Atranjikhera, Śrāvastī, Vaiśālī, Buxar and Pāṭaliputra, floods seem to have played a crucial role in their ultimate collapse and desertion, at Taxila, Sanghol, Kauśāmbī, Bhīṭā, Rājghāt, Chirand, Balirajgarh and Rajbadidanga, they seem to have

adversely affected the settlement. Although we do not know much about other sites in this context, it can be suggested that the towns located on river banks might have had to cope up not only with floods but also with the changing course of the stream.

In this context it will be worth while to refer to the system of fortification of ancient Indian towns. What was the purpose of these fortifications ? Were they designed only as a defence mechanism against possible foreign invasions ? Recently an analysis has been made of the fortification systems of nine important sites of the Ganga valley, viz., Ujjain, Kauśāmbī, Rājghāt, Rājgir, Pāṭaliputra, Ahichchhatra, Śrāvasti, New Rājgir and Vaiśālī, with a view to precisely determining the nature of the fortifications.[286] It has been suggested that the massive mud-walls reinforced by timber and externally riveted with burnt brick could be interpreted as embankments meant to resist floods at least in the case of Ujjain, Kauśāmbī, Rājghāt and possibly Śrāvastī.[287] The substantial sizes of the mud-walls must have involved tremendous labour together with huge resources in terms of men and materials, and an effort of this type certainly indicates the immense magnitude of the danger facing those societies. For checking an invading army it was needless to have a rampart of 75 metres basal width or a succession of subsidiary ramparts as wide when put together.[288] The same analysis applies to the moats with widths of 30 metres and above and reaching to 300 metres at one place at Kauśāmbī.[289] It has been suggested that these were diversion channels.[290] In fact, the brick rivetments with the particular angle of batter as at Kauśāmbī could be easily scaled in mass sortie by an invading army; floods, however, would be checked from eroding the embankment by these rivetments.[291] Similarly, the lack of parapets above the ramparts at Kauśāmbī, Rājghāt and Ujjain suggests the non-military nature of these defences, for in the absence of parapets it would be merely shifting the battle-ground from a plain to a mound. All these evidences suggest that in the case of Kauśāmbī, Rājghāt, Ujjain and possibly Śrāvastī, the fortification system was hardly designed and devised as a mechanism to check foreign invaders; they instead of having ramparts and moats had embankments and diversion channels meant as flood

protection devices. Thus, it can be argued that these sites were susceptible to floods, so much so that such massive structures presumably erected at a very high cost had to be built to protect the sites. The periodical rivetments apparently suggest breach in the device, a fact which might illustrate the intensity of floods. In the light of the above discussions the suggestion that floods might have adversely affected these settlements, will be neither far-fetched nor out of tune with the existing evidence.

(2) Political Causes

One of the important factors for urbanisation is the existence of a political authority. This political authority was mainly charged with looking after a regular channelling of foodstuff from the villages into towns and also establishing peace within a large area. In ancient India, in the post-Kuṣāṇa phase the situation started changing. The literary and archaeological sources confirm that by the opening of the 3rd century A.D., the Kuṣāṇas had lost a large part of their territory and were reduced to a small ruling power having control over a small principality. The Kuṣāṇa power suffered considerably both because of internal problems and external aggressions. Their power and prestige was decisively undermined by the rise of local chiefs and republican states like the Yaudheyas, the Kuṇindas, the Arjunāyanas, the Nāgas of Padmāvatī and the Mālavas of Rajputana, on the one hand, and the Sassanian invasion in north-western India, on the other. The gradual replacement of the Kuṣāṇas by other ruling dynasties is also suggested by the replacement of the Kuṣāṇa currency by imitations or indigenous coins. The decline of the Kuṣāṇas meant the loss of a central and controlling authority which had given some sort of a unitary character to a vast area within which trade could continue with much ease. Similarly, the non-Indian part of Kuṣāṇa dominions together with their control over certain crucial trade-routes had given them an advantageous position in the field of foreign trade too. Thus, the decline of the Kuṣāṇa power meant a rude setback for both external and internal trade which, in turn, must have hampered industrial activities. Due to disturbed situation in the post-Kuṣāṇa period, agriculture too was adversely

affected which must have diminished the surplus supplies. Thus, a situation had emerged in the post-Kuṣāṇa period when trade and industry were languishing and agricultural production was decreasing, meaning thereby not only the weakening of urban economy, but also the shattering of the urban base of subsistence. Though the Guptas, who established an empire in the 4th century A.D., are also regarded as an imperial power, their rule was hardly congenial for urban growth. The emergence of various groups of intermediaries not only led to typical economic formations, but also meant the unleashing of a trend towards decentralisation and loss of trade, both internal and external. In fact, the Gupta period generated the forces of deurbanisation, a fact which gets confirmation from the Gupta layers of different excavated urban/rural sites of ancient India.

Urban centres also developed because of certain administrative compulsions of the state. Cities also emerged as capitals and provincial seats of government. Such cities also stood a chance of being abandoned or weakened if the seat of government either shifted to some other place or disappeared altogether. One of the earliest evidences of this type is forthcoming from Rājagṛha. Initially, this urban centre was the capital of Magadha, but once the capital was shifted to Pāṭaliputra, the latter started gaining importance at the cost of the former. Similar instances are also forthcoming from the post-Kuṣāṇa period. Thus, the city of Mathurā came to be denuded of its political status during the reign of Samudragupta, when this Gupta king defeated the local ruler Gaṇapatināga and annexed Mathurā to the Gupta empire.[292] This must have undermined the urban status of Mathurā. A somewhat similar fate awaited Kauśāmbī too. This city too must have started losing its importance, and consequently urban status, once it lost its political importance after being conquered by Samudragupta. Vārāṇasī and other urban centres of the area too might have suffered because of frequent changes of ruling dynasties.

Vaiśālī and Pāṭaliputra, the two flourishing urban centres of Bihar, are outstanding instances of the decay of towns because of the withdrawal of seats of government. Pāṭaliputra started declining from the time of the Guptas when the imperial capital came to be established at Prayāga.[293] Still Pāṭaliputra retained some of its political importance mainly

because it was an important seat of provincial administration under the Guptas. But once the Gupta dynasty started declining, Pāṭaliputra too lost all its political importance. This is not to suggest that this urban centre declined because of politico-administrative reasons, certainly there were other factors too, but Pāṭaliputra's loss of a cosmopolitan character was mainly because of the shifting of the capital from there.

Vaiśālī too had a similar fate in store. Since the time of its inception it continued to flourish under important kings and dynasties. In the 3rd century A.D., it was once again under the Lichchhavis and had all the manifestations of an urban centre. With its merger with the Gupta empire, however, the process of decline seems to have begun. Although Vaiśālī was a Gupta seat of provincial administration, it seems apparent from the available archaeological evidences that either the Gupta hold over this province was precarious or they took little interest in the affairs of this area. In either case Vaiśālī's urban status came to be affected. And, finally with the shifting of the capital of Tīrabhukti from this place, Vaiśālī lost whatever political importance it had under the Guptas. Although other factors too might have contributed their mite to this process of decline, it cannot be denied that because of these political developments Vaiśālī lost a major rationale for its existence.

The above survey demonstrates that some of the most important urban centres of ancient India, like Pāṭaliputra and Vaiśālī, were badly affected because of the shifting of seats of administration from these places. A host of other towns of northern India were also adversely affected because of the loss of their political importance. The first city of Taxila, Bhir Mound, however, decayed mainly because the city was shifted to Sirkap[294] and the latter city met a similar fate because the Kuṣāṇas decided to abandon it and build a new city represented by Sirsukh.[295] Thus, politico-administrative factor also played an important role in the decline of towns.

(3) *Foreign Invasion*

One of the most potent factors responsible for the decline and disappearance of urban centres in post-Kuṣāṇa times was

the invasion of the Hūṇas. In this context much has been made of the so-called anti-Buddhist attitude of Mihirakula. It is said that although a devout Śaiva, he initially was not intolerant towards Buddhism. He is said to have even asked a Buddhist clergy to send him a teacher, but the clergy insulted Mihirakula by recommending to him a servant of his own household. This naturally enraged him and he "forthwith ordered the utter extermination of the Buddhist church throughout all his dominions."[296] Taking cue from this tradition it has been suggested that Mihirakula destroyed the places of Buddhist importance mainly because of his religious idiosyncrasies.[297] But the available evidences point to an altogether different situation. First, it was not Mihirakula who destroyed all the cities; some of the cities, like Kauśāmbī, were destroyed by his predecessor Toramāṇa.[298] In the case of other cities too evidence regarding their destruction specifically by Mihirakula is hardly available. Thus to regard Mihirakula as the sole destroyer of cities is only partially true.

Similarly, the motive behind the destruction of cities was not religious; it had a lot to do with economics as well. The Hūṇas, whose only preoccupation was war, needed money to boost up their military activities and it was mainly the economic reasons that prompted them to plunder and destroy the monasteries.[299] By this time on account of generous gifts of the laity, the Buddhist monasteries had come to accumulate much wealth; the Buddhist establishments were more repositories of wealth than centres of learning, religion and culture. And to top it all these establishments were completely unprotected. For the Hūṇas, who needed money for their wars, these Buddhist establishments were the best targets of attack.[300] Their need for wealth may explain even the destruction of cities in general. Thus, it was mainly the economic reasons that led the Hūṇas to plunder the cities and towns and destroy the monasteries to grab their riches.[301]

The region of Gandhāra felt the first impact of the Hūṇa invasion and the excavated remains of the area indicate the probable Hūṇa destruction of the cities of this area. At Saikhan Dheri the evidence of fire is clearly noticeable,[302] but it is difficult to trace the reasons for this conflagration. The outbreak of the fire roughly synchronises with the arrival of the

Hūṇas in this part, which might suggest that the fire at Saikhan Dheri had something to do with the Hūṇas. Maṇikāyala, another site of the north-west, also seems to have been destroyed by fire. The exposed ruined buildings contain considerable deposits of charcoal and ash. The wall of the monastery is completely blackened and wrought block of *kankar* has been converted into lime obviously because of a large-scale conflagration.[303] That this fire had something to do with the Hūṇa invasion cannot be ruled out. It seems that Puruṣapura too had to face a similar Hūṇa onslaught. When Hsuan-Tsang came to India he found that the famous Kaṇiṣka *stūpa* was being repaired after it had been destroyed by fire.[304] This fire may be attributed to the vandalism of the Hūṇas.

The evidence of deliberate destruction of Buddhist establishments is also forthcoming from Charsada (Puṣkalāvati). This city seems to have suffered a lot at the hands of the Hūṇas. Excavations in the neighbourhood of Puṣkalāvati, especially at Pataṭu and Ghaz dheris, suggest that the Buddhist structures were deliberately destroyed possibly by an invading army; Wheeler's excavation hardly leaves any doubt as to the total disappearance of this urban centre by the 7th century A.D.[305] The evidence of deliberate destruction as well as the complete abandonment of the site by the 7th century A.D. pointedly suggests the destruction of this site by the Hūṇas.

That Sirsukh, the last city-site of Taxila, was also destroyed by the Hūṇas is clear from the evidences forthcoming from that site. The most illustrative evidence of this destruction has been excavated at Dharmarājikā. Here the monastic courts as well as other buildings of the pre-Court H Phase seem to have been completely destroyed by enemy action. In place of Court G, a much smaller Court H—a fourth of the size of the old structure—was built over the ruins. Marshall suggests that this contraction of area may have been connected with the question of defence, since all the monasteries from this period were provided with exceptionally strong walls and in other respects were obviously designed to withstand assault.[306] But all these precautions and arrangements proved to be futile, for Court H too was burnt out and reduced to ruins, probably in the latter half of the 5th century A.D. Evidence of this catastrophe is clearly visible in the masses of charred timber, iron

clamps, nails and other fittings with which the court and cells were littered, and in a heap of half-burnt wheat in front of Cell 8.[307] This double destruction of this monastery can be explained in terms of two Hūṇa invasions. The first destruction was probably wrought during their early occupation of the north-western India, while the second and final blow was delivered by either Toramāṇa or Mihirakula, notwithstanding the approximate date of the destruction of the site as suggested by Marshall. The Hūṇa destruction of this monastery is also suggested by the discovery of numerous Buddha heads from a small chapel. It has been suggested that all these heads were originally the part of full Buddha statues and after the Hūṇa wreckage this mutilated part of the statues was kept together in one or two best preserved chapels, a fact attested to by the discovery of numerous mutilated hands and feet belonging to images.[308] This situation is further corroborated by an analysis of the human skeletons excavated in the Dharmarājikā monastery. From the position of skeletons *in situ*, it is almost clear that they were murdered. The head in some cases is separated from the body and lies at a considerable distance from the trunk, and the bones are scattered. One of the skeletons provides clear evidence of calcination, suggesting thereby that the bodies of some of the individuals murdered were partially burnt in the general conflagration set up by the plundering invaders.[309]

The Kuṇāla *stūpa* too seems to have been burnt down by the Hūṇas. The accumulated debris inside the building, the charred remains of timber over the debris and the discovery of two arrowheads among the charcoal[310] suggest that its destruction too was due to hostile invasion, apparently of the Hūṇas. The evidence of a large-scale conflagration and consequent destruction of the monastery is also forthcoming from Bhamāla,[311] whereas Mohrā Morādu betrays other signs of violent foreign invasion.[312] That the monastery of Jauliāñ too was burnt down is also evident.[313] In fact, the whole site repeats a somewhat similar pattern of destruction. Almost all the monasteries destroyed were bzrnt down and after that they were abandoned. This was obviously done by the Hūṇas who not only burnt the monasteries, but killed the residents if resisted[314] and took away with them all the wealth of the monastery rendering the continuation of habitation virtually impossible.

Some of the urban sites of the Punjab too bear witness to the impact of the Hūṇa invasion. Thus, Rupar seems to have been temporarily deserted after Period V because of this invasion. Period V, which has yielded coins of both Toramāṇa and Mihirakula, not only dwindled in terms of habitational area, but probably failed to survive because of the Hūṇa onslaughts. It was only in the 13th century A.D. that the site came to be reinhabited.[315] Another site of this area, Ajaram, which has yielded many post-Maurya and pre-Gupta coins, shows two layers of ashy material. This has been interpreted to mean that the city was burnt successively by the Hūṇas and the Muslims.[316]

The conquest and destruction of Kauśāmbī by Hūṇas is suggested by numerous evidences. Two seals were discovered from the monastery of Ghośitārāma, one counter-struck by letters, *To-ra-mā-ṇa* and the other with the legend *Hūṇa-Rāja*,[317] evidently referring to the same king. The barbed arrowheads of the type (K), similar to those found at Taxila, discovered from Kauśāmbī in large numbers,[318] indicate the Hūṇa devastation of this city. This is further corroborated by the fact that the last phase of occupation ended with an extensive conflagration and destruction on a large scale perhaps indicating an invasion.[319] The excavator is apparently hinting at the invasion of the Hūṇas, who like other activities in the north-west and the Punjab, destroyed the city of Kauśāmbī by possibly plundering and subsequently burning it.

Signs of external aggression and conflagration are also forthcoming from the site of Bhīṭā. From the houses and lanes of the excavated area missiles like catapult and sling-balls were discovered in comparatively large numbers. This is indicative of the fact that an invading army was on the march within the city attacking even those who had taken shelter within houses. Some of the houses seem to have been completely burnt,[320] implying thereby the presence of hostile invaders. The signs of burning suggest that the Hūṇas under Toramāṇa destroyed this city too like the nearby city of Kauśāmbī.

The Hūṇas also destroyed the Buddhist monastery of Kasia (Kuṣinagara). Coins of Kaṇiṣka in association with charred substance were found here.[321] Kasia, which flourished as a famous Buddhist centre with its *nirvāṇa-stūpa*, became an

obvious target of the Hūṇas[322] because the invaders might have thought that the Buddhist monastery of this place, so famous because of its close association with the life of the Buddha, was a storehouse of wealth.

Sārnāth too has revealed many signs of conflagration. Almost every excavation carried in and around this place has unearthed evidence of fire. Cunningham noticed fire-charred timber and half-burnt grain. He was told by Major Kittoe that "all has been sacked and burnt, priests, temples, idols, etc., are all fused into huge heaps; and this has happened more than once."[323] The destruction of Sārnāth was so sudden and unexpected that the inhabitants were completely taken by surprise, a fact suggested by the discovery of the remains of ready-made wheaten cakes from one of the chambers of the monastery.[324] Although any direct evidence suggesting the destruction of Sārnāth by the Hūṇas is lacking, it can be asserted that as they came up to Pāṭaliputra they might have plundered and burnt the monastery at Sārnāth on the way.

Vaiśālī and Pāṭaliputra, the two prominent cities of ancient Bihar, also seem to have been deliberately burnt by hostile elements. At Vaiśālī, the excavation carried out by T. Bloch brought to light evidence suggesting the plunder and destruction of the city. The earth was found to have been mixed up with numerous pots as well as possibly human bones. This might suggest that the invaders not only murdered the inhabitants, but also destroyed their belongings. Heaps of ashes and pieces of burnt wood were also found at the site.[325] This will suggest that the outsiders destroyed the city by burning it down. It is, however, noteworthy that the pattern of burning down the city which is noticed at Vaiśālī might suggest that the Hūṇas had something to do with the plunder and destruction of this city also.

The role of fire in the destruction of the city of Pāṭaliputra too cannot be minimised. Almost all the excavations till this date have vividly brought out the signs of conflagration. Spooner noticed signs of "tremendous conflagration" at Pāṭaliputra and dated this catastrophe to some time in the 5th century A.D.[326] This fire seems to have been very severe, for even the copper bolts which were used for fixing timber to stone columns expanded and caused the fragmentation of stone columns.[327]

Spooner too noticed clear evidence of fire during excavations in the Hall area, which seems to be partially corroborated by 1951-56 excavations.[328] That the Hūṇas were responsible for the plunder and destruction of a number of ancient Indian cities is amply demonstrated by the above survey. Places closely associated and identified with Buddhism were not the sole targets of destruction, but even cities like Pāṭaliputra, Kauśāmbī, etc., had to suffer mainly because of the need for wealth on the part of the Hūṇas.

(4) *Feudal Wars and Sacking of Cities*

The frequent feudal wars of the Gupta and more so of the post-Gupta period were responsible for the destruction of cities. The sacking of cities seems to have been a common feature of the wars of this period.[329] Ānanda, the governor of Kramarājya, advised king Uchchala to attack Śrīnagara and plunder the neighbouring towns and villages.[330] The *Rājataraṅgiṇī* refers to numerous instances of burning and pillaging of cities.[331] This text gives a vivid description of the ruin brought about by the sack of Śrīnagara. The residents were murdered and granaries put on fire. The whole settlement was completely destroyed. Another deplorable aspect of these wars was attempts by the invading army to cripple the economy of its rival,[332] which again would have proved fatal to the existence of urban centres. Thus, the feudal wars of the post-Gupta times too led to the destruction of a number of cities.

(5) *Religious Causes*

An important causative factor for the emergence of some of the towns in ancient India was their association with Buddhism. Almost all the important centres associated with the life of the Buddha emerged as urban centres mainly because of religious pilgrims visiting these places. In the post-Kuṣāṇa phase Buddhism started losing its earlier influence and it was but natural that such urban centres which were thriving upon religious pilgrimage and lay donations started decaying. Whatever may have been the other reasons, towns like Śrāvastī, Kapilavastu, Kuśinagara, Sārnāth, etc., must have started declining once they lost

their rationale for existence. While the origin of Buddhism was responsible for the growth of a number of towns, its decline too was equally responsible for the decay of many of these towns.

(6) *Economic Causes*

The above discussed causes for the disappearance of towns mainly seem to be isolated in nature; they partially explain the decline of some towns here and there. This will mean that these causes hardly explain the almost general pattern of the decay of urban centres in the post-Kuṣāṇa period. Such an all-embracing phenomenon can hardly be fully explained in terms of isolated causes, there must have been an underlying factor undermining the very basis of urban survival. To us it seems that the economic factor which was basically responsible for the growth of towns also led to their decline in the post-Kuṣāṇa phase. We know that the Kuṣāṇa towns thrived mainly because of a prosperous economic situation in terms of flourishing arts and crafts as well as extensive trade contacts both internal and external. It seems that the situation changed in the post-Kuṣāṇa times thereby adversely affecting the contemporary urban centres. It is thus imperative in this context to analyse the Gupta economic situation in order to bring into focus the emerging elements in the economic sphere which accounted for the weakening of urban tradition during this period.

In recent years it has been emphasised that towards the end of the Gupta period a major socio-economic change took place. These changes have been explained in terms of the gradual crystallisation of a formation termed as "Indian Feudalism".[333] The origins of this new development are traced to the land-grants of the pre-Gupta period, which started manifesting itself from the Gupta period onwards.[334] The impetus to this new development came from the large-scale transfers of land revenues and land to both secular and religious elements by princes and their vassals. The administrative rights over land were given up for the first time in the grants made to the Buddhist monks by the Sātavāhana king Gautamīputra Śātakarṇi in the 2nd century A.D.[335] From the 5th century A.D., the rulers even

gave up their control over all sources of revenue accruing from the granted land.[336] The immunities recorded in the Vākāṭaka inscriptions are quite illustrative : (i) *akaradāyī* (not to pay taxes); (ii) *abhaṭachchhatraprāveśyaḥ* (not to be entered by troops), (iii) *ampramparagovalivarddaḥ* (not to supply cattle for the transport of touring officials), (iv) *apuṣpakṣirasandohaḥ* (not to supply milk, etc., to officers), (v) *achārāsanacharmāṅgāraḥ* (not to provide hide and charcoal), (vi) *alavaṇaklinnakreṇikhanakaḥ* (free from the purchase and digging of salt), (vii) *apaśumedhyaḥ* (not to supply animals for sacrifice), (viii) *sanidhiḥ* (with the right to treasures), (ix) *sopanidhiḥ* (with the right to deposits), and (x) *saklṛptopaklṛptaḥ* (with *klṛpta* and *upaklṛpta*).[337] The Basim plates of Vindhyaśakti II provide a still bigger list of immunities.[338] Thus, control over mines, which formed an important sign of the king's sovereignty, was also transferred to the donee.[339]

We do not have much evidence of such land-grants by the Gupta emperors. The Bihar stone inscription of Skandagupta, dated A.D. 489, however, makes it clear that whole villages were granted by the Gupta emperors on the same terms as their feudatories.[340] The village in question was assigned as an *agrahāra* according to the *akṣavanivī* tenure.[341] The *akṣavanivī* grants made by individuals in northern and eastern Bengal and eastern Bihar also received the willing consent of the Gupta emperors. Obviously in such grants the state was willing to forgo its share of revenue in lieu of temporal considerations.[342]

A significant feature of the period was the beginning of the grant of land by the king to his officials in lieu of salary. The *Manusmṛti's* provision for the grant of land to revenue officials, who were in charge of one, ten, twenty, a hundred or a thousand villages,[343] has been reproduced in the law-book of *Bṛhaspati*.[344] This may suggest the continuation of this practice in the Gupta period. Although we do not possess any epigraphic evidence on the subject, the Chinese sources can prove helpful. Fa-hsien has something to say about the mode of payment to officials but the concerned passage has been variously interpreted as indicating "regular salaries", "allotted revenues", and "emoluments and pensions".[345] The second and third interpretations definitely imply the practice of land-grant to officials *in lieu* of their salaries. This interpretation

becomes all the more valid if we keep in mind the assertion of Hsuen-Tsang that all officers, high and low, were remunerated by allotments of revenues of lands.[346]

The land-grants made by Gupta emperors, their feudatories and private individuals created powerful intermediaries wielding considerable economic and political power.[347] The existence of such a landowning class above the peasantry is attested to by Yājñavalkya who states that land is to be assigned to the cultivator by the land-owher and not by the king.[348] Bṛhaspati too provides for a *svāmī* or owner above the actual tiller.[349] Yājñavalkya also introduces three stages in the organisation of land economy, namely, *mahīpati* (king), *kṣetrasvāmī* (landowner) and *karṣaka* (cultivator),[350] a position corroborated by Bṛhaspati.[351] Although the extent of land occupied by different types of intermediaries cannot be ascertained, it is certain that they were quite considerable in number and provided an economic basis for the rise of feudalism.

The period also witnessed the growth of institutional intermediaries—the landowning temples, the prototype of later *maṭhas*. Although a majority of grants were made in favour of individuals, in some cases the religious institutions were also the recipients of such grants. During the first half of the 6th century A.D., two such endowments were made in favour of a temple of goddess Piṣṭapurī in Central India.[352] The Maukhari chieftain Anantavarman granted a village in the Gaya district to the goddess Bhavānī in the second half of the same century.[353] Similar grants were made in Bengal during the 5th and 6th centuries A.D.[354] Fa-hsien also refers to somewhat similar endowments made in favour of Buddhist monasteries.[355] As a result of such land-grants these temples and monasteries developed as various semi-independent pockets enjoying immunities on religious grounds.

The terms of transfer contained in the land-grants show that plots of land were cultivated by temporary peasants instead of the religious donees themselves. The number of independent and permanent peasant proprietors paying land tax directly to the king was probably falling off.[356] Besides their decreasing number, the position of free peasantry was also depreciating mainly due to the imposition of several new taxes comparable to various feudal dues of medieval Europe. During the Gupta

period the villagers had to pay forced contribution of money or supplies to royal troops and officials halting or passing through their village.[357] The villagers were also subjected to all types of forced labour.[358] The practice of collecting contributions, which were locally consumed by royal officers and troops instead of finding their way to royal treasury, created another class of intermediaries and thus further lowered the position of the free peasantry. Besides paying a fixed tax and these forced contributions, the peasants had also to pay various impositions[359] typically feudal in character. This not only made the condition of free peasants pathetic but also adversely affected the agrarian economy. So many taxes and forced contributions together with recurring feudal wars leading to the destruction of standing crops not only affected production but also minimised the production of surplus and hence affected the towns. Thus, the developing feudal agrarian set-up was hardly conducive for urban growth.

As a result of land-grants, the independent and self-sufficient economic units, which were the hallmark of medieval European feudalism, also arose in the Gupta period. The several economic rights conferred upon the beneficiaries snapped the economic ties between the central authority and the original cultivators of the donated areas, which made the beneficiaries more dependent on the local artisans and cultivators than on the royal officials for the continuity and development of their economy. Due to the rise of such local units of production irrigation also tended to become a local responsibility during the Gupta period. Bṛhaspati explicitly lays down that the guilds should look after irrigation dams.[360] Incidentally, the guilds became very powerful, and might have started functioning as independent units of production.[361] All these developments naturally undermined the central authority and helped the rise of independent economic units.

The emergence of local units of production is also attested to by the paucity of coins of common use from the Gupta period and general absence of coins in the post-Gupta times. While the post-Mauryan dynasties issued a considerable number of copper coins, the Gupta kings, other than Rāmagupta and Kumāragupta I, hardly issued any copper coins. This fact coupled with Fa-hsien's statement that *cowries* formed the

common medium of exchange, suggests that money economy was becoming weaker in this period. The Guptas, no doubt, issued large number of gold coins, but they were used in larger transactions, most probably in the sale and purchase of land. It is noteworthy that it was only after 350 years or so after the Guptas that gold coins reappeared on the Indian scene. It seems to us that due to the rise of local units of production the practice of the day was local production for local consumption, implying thereby the unnecessity of internal exchange on any considerable scale, hence the absence of coins for common use.[362] The decline of trade is also attested to by the decline of earlier trade-routes in the Gupta and post-Gupta times. Thus, after the Kuṣāṇas the famous route called the *Uttarāpatha* fell into disuse. This implies that all the urban centres lying on this route between Mathurā and Taxila must have suffered very badly. Naturally, the urban centres of the districts of Bulandshahr, Meerut, Muzaffarnagar, Saharanpur, Ambala, Rupar, Ludhiana and Jullundur together with Taxila, through which this route passed, lost their economic rationale and declined. Again, the eight trade-routes which passed through Mithilā connecting it with the whole of India, in ancient times,[363] find no mention in early medieval texts,[364] suggesting their decline by this time. The urban centres located on these trade-routes must have felt the impact of this development.

The new economic developments also partially affected India's foreign trade in this period. The Indian foreign trade witnessed its climax for about 100 years or so in the first and second centuries A.D. when India not only exported a number of luxury articles to the eastern part of the Roman empire,[365] but also participated in the trade through the Silk Route.[366] By the beginning of the Gupta period Indo-Roman trade was stopped but silk trade with Byzantine was revived, which continued till middle of the 6th century A.D.[367] But once the Byzantinians learnt the art of growing silk from the Chinese, they no longer needed to import it from India and China.[368] Evidences also suggest that the Gupta connection with Central Asia was either very restricted or practically non-existent, for the Punjab and West Pakistan have yielded very few Gupta coins and inscriptions. Moreover, whatever contact the Guptas had with Central Asia and Western Asia was completely des-

troyed by the Hūṇa invasions.[369] The coastal people of south India, no doubt, carried on trade with the countries of South East Asia and China,[370] but its volume was too little to seriously affect the general economic pattern of the interior areas of the country. This overall decline of trade, both internal and external, weakened the economic links between the coastal towns and towns of the interior as well as between towns and villages, a situation which was completely detrimental to the existence of urban centres.

Thus, all the changes that were taking place in the contemporary economy, both at the agrarian and commercial level, were completely anti-urban in nature, and in such a milieu the decline of towns must have become imminent. Moreover, from a number of recent studies it clearly emerges that thee conomic basis of the early historic urban centres of India was an agricultural surplus generated by the introduction of iron technology together with the gradual crystallisation of a power structure. A certain amount of commercialisation of this surplus was necessitated by the presence of specialised labour and of surplus appropriating social groups which were not necessarily confined to the monarch, his kith and kin and his officials. Viewed from this perspective it would seem that sizable surplus, trade and power structure are essential factors in urban beginnings and growth; we know that new agrarian relations were hardly conducive for the production and channelling of a sizable surplus to towns, trade was languishing and feudalisation of political structure had undermined the central authority in the Gupta and post-Gupta times. Hence, even if viewed from a theoretical perspective, the decline of urban centres in our period seems quite logical.[371] Craft came to be seen as a menial or inferior occupation. Urban artisans had no long-term and regular appointment. Village artisan was constantly tied to several cultivators and received his wages as fixed shares of the harvest. Professional castes originate from the 5th century A.D. and that led to the decline in economic and technical progress, to parasitic use of economic surplus and social stagnation. In the villages division of labour stopped and this made the villages quite independent of outside influence. Lack of communication was the basic reason.

Here it can be pointed out that the continuation of some of

the post-Gupta towns can be explained in terms of their continuing religious, educational and political importance. Thus, Kanauj thrived because it was the capital of the Maukharis; Balirajgarh, Banagarh, Chandraketugarh, Rajbadidanga and Nanur survived because they were probably centres of Pāla administration; Nālandā and Vikramaśilā were early medieval educational centres; and Mathurā, Kashipur as well as Goswamikhanda remained in occupation because of their association with brāhmaṇical religion. But in the absence of a supporting base in terms of commercial economy, most of these centres hardly indicate the Kuṣāṇa level of urban prosperity. Moreover, even within the Pāla centre of influence those towns which were centres of commerce, like Tāmralipti, declined. This will imply that the existence of these towns hardly played any crucial role either in the ancient urban tradition or in the revival of towns. They were a mere oasis in the vast desert.

The above survey will show that the post-Kuṣāṇa period was in a way the phase of de-urbanisation in the Indian context. Towns started decaying from the Gupta period and some of them even disappeared during their rule, notwithstanding the tall claims of the "golden agers". Whatever remained of Gupta urbanism received further setback in the post-Gupta times. The urban centres of historical India, however, declined in a way which was quite different from the Harappan cities. While the decline of Harappan towns marked an end of town-life for about a millennium, the urban centres did not completely disappear in the Gupta and post-Gupta times; some centres continued to thrive as towns or centres of politieal power on a temporary basis.

NOTES

1. Thomas Watters, *On Yuan Chwang's Travels in India* (Eds. T.W. Rhys Davids & S.W. Bushell, 1904), Vol. I, pp. 198-99.
2. *Ibid.*, p. 202.
3. *Ibid.*, p. 205.
8. *Ibid.*, p. 208.
5. *Ibid*, p. 214.
6. *Ibid.*. p. 240.
7. *Ibid.*, p. 251.
8. *ASI-AR, 1902-03*, p. 164.
9. M. Wheeler, *Charsada* (1962), p. 6.
10. *ASI-AR, 1902-03*, p. 143.
11. *AP*, Vol. II (1965-66), pp. 35. 38, 24.
12. *Ibid.*, p. 38.

13. *Ibid*,, p. 24.
14. J. Marshall, *Taxila*, I, p. 112.
15. *Ibid*, p. 112.
16. *Ibid.*, p. 212.
17. *Ibid.*, p. 216.
18 'Taxilā (Sirkap). 1944-5', *AI*, no. 4, p. 45.
19. J. Marshall, *op. cit.*, p. 221.
20. Taken with minor additions from K. Prasad, *Kusana Towns in India* (unpublished Ph D. Thesis, Patna University, 1978), p. 326.
21. Out of a total of 335 coins discovered from this site, 173 are defaced and 11 belong to pre-Kuṣāna kings (J. Marshall, *op. cit.*, pp. 345, 347).
22. J. Marshall, *op, cit.*, p. 285.
23. *Ibid.*, p. 395.
24. *Ibid.*, pp. 285-286.
25. *Ibid.*, p, 320.
26. T. Watters, *op. cit.*, p. 279.
27. *Ibid.*, p. 283.
28. *Ibid.*, p. 284.
29. *Ibid.*
30. *ASI-AR*, *1921-22*, p. 21; *IAR*, *1961-62*, pp. 16-17; *IAR*, 1962-*63*, p. 9.
31. *IAR*, *1962-63*, p. 9.
32. *IAR*, *1963-64*, p. 27.
33. *Ibid.*, p. 28.
34. R.S. Sharma, 'Decay of Gangetic Towns in Gupta and Post-Gupta Times', *ABORI* (Golden Jubilee Volume, 1973), p. 137. *IAR*, *1963-64*, p. 28, however, reports only 9 sites possibly yielding Kuṣāṇa red wares, and only three sites yielding both Kuṣāṇa and medieval wares.
35. R.S. Sharma, *op. cit.*, p. 137.
36. *IAR 1964-65*, p. 33.
37, *IAR*, *1970-71*, p. 30.
38. *IAR*, *1968-69*, p. 26.
39. R.S. Sharma's suggestion that no structures of Gupta or pre-Gupta times have been uncovered (*op. cit.*, p. 141) seems to be fantastic in the light of the structures excavated.
40. *IAR*, *1968-69*, p. 26.
41. Y.D. Sharma, 'Remains of Early Historical Cities,' *Archaeological Remains, Monuments and Museums*, pt. I, pp. 49-50.
42, *IAR*, *1953-54*, p. 7.
43. R.S. Sharma, *op. cit* , p, 138.
44. *IAR*, *1969-70*, p. 31.
45, *IAR*, *1963-64*, pp. 27-28.
46. *IAR*, *1968-69*, p. 9.
47. *IAR*, *1970-71*, p. 16.
48. *IAR*, 1971-72, p. 24.
49. *IAR*, 1970-71, p. 16.
50. *IAR*, *1971-72*, p. 24.
51, *IAR*, *1970-71*, p. 10.
52. *Ibid.*
53 *IAR*, *1959-70*, p. 9; *1970-71*, p. 10.
54. *IAR*, *1970-71*, p. 10.
55. *IAR*, *1969-70*, p. 10.
56. *IAR*, *1969-70*, p. 10; *1k70-71*, p. 10.
57, *IAR*, *1970-71*, p. 11.
58. *IAR*, *1971-72*, p. 41.
59. *IAR*, *1971-72*, p. 42.
60. *IAR*, *1970-71*, p. 32; *1971-72*, p. 42.
61. *IAR*, *1963-64*, p. 29.
62. T. Watters; *op. cit* , p. 300.
63. *IAR*, *1962-63*, p. 31.
64. *ASIR-Cunningham*, VI, p. 179.
65. *IAR*, *1962-63*, pp. 36-37.
66. *IAR*, *1963-64*, pp. 53-54.
67. The first two sites are reported in *IAR*, *1963-64*, p. 54, while the rest are reported in *IAR*, *1964-65*, p. 44.
68. *IAR*, *1970-71*, p. 37.
69. Y D Sharma, *op. cit.*, pp. 52-53.
70. R.S. Sharma, *op. cit.*, p. 140.
71. *IAR*, *1962-63*, p. 36.

72. *IAR, 1960-61*, p. 35.
73. R.S. Sharma, *op. cit.*, p. 141.
74. *IAR, 1960-61*, p. 35.
75. *IAR, 1962-63*, p. 36.
76. *H.A.* Giles, *The Travels of Fa-hsien* (399-414 A.D.), (1923), p. 20.
77. T. Watters, *op. cit,*, p. 301.
78. *Ibid.*
79. *Ibid.*
80. *IAR, 1954-55*, pp. 15-16.
81. *Ibid.*, p. 16.
82. R. S. Sharma, *op. cit.*, pp. 141-42.
83. *IAR, 1969-70*, p. 42.
84. *IAR, 1970-71*, p. 40; *1971-72*, p. 48.
85. *IAR, 1970-71*, p. 40.
86. *IAR, 1969-70*, p. 42.
87. *IAR, 1968-69*, p. 40.
88. *Ibid.*
89. *IAR, 1969-70*, p. 44.
90. H.A. Giles, *op. cit.*, p. 30.
91. T. Watters, *op. cit.*, p. 377.
92. *ASIR-Cunningham*, I, pp. 332-33.
93. K.K. Sinha, *Excavations at Śrāvastī* (1959), p. 11.
94. *Ibid.*, p. VI.
95. *ASI-AR, 1911-12*, p. 30.
96, *Ibid.*
97. *Ibid.*, *p.* 34.
98. *Ibid.*
99. *Ibid.*
100. *IAR*, 1963-64, p. 42.
101. *Ibid.*
102. *IAR, 1953-54*, p. 9.
103. G.R. Sharma, *Excavations at Kauśāmbī, 1949-50, MASI*, no. 74, pp. 19-20.
104. *Ibid.*, p. 20.
105. *Ibid.*
106. T. Watters, *op. cit.*, p. 366.
167. *Ibid.*, p. 369.
108. *IAR, 1963-64*, p. 44.
109. *Ibid.*
110. *Ibid.*
111. Y.D. Sharma, *op. cit.*, p. 51.
112. *IAR, 1963-64*, p. 44.
113. H.A. Giles, *op. cit.*, p. 36.
114. *Ibid.*, p. 38.
115. T. Watters, *op. cit.*, Vol. II, p. 1.
116. *IAR, 1970-71*, p. 37.
117. T. Watters, *op. cit.*, Vol. I, pp. 354-59.
118. R.S. Sharma, *op. cit.*, pp. 143-44.
119. *The Annual Bibliography of Indian History and Indology*, III, p. xlii.
120. *IAR, 1957-58*, p. 50. However, in another report the date of Period III is given as extending from the beginning of the Christian era to c. A.D. 300 (*IAR, 1960-61*, p. 37.
121. *IAR, 1957-58*, p. 50; *1960-61*, p. 37.
122. *IAR, 1964-65*, p. 45.
123. *IAR, 1964-65*, p. 45; *1961-62*, pp. 58-59.
124. *IAR, 1964-65*, p. 45.
125. *Ibid., 1960-61*, p. 39.
126. *IAR, 1960-61*, p. 39.
127. *IAR, 1967-68*, pp. 48-49.
128. *IAR, 1971-72*, p. 49.
129. R.S. Sharma, on the basis of loca inquiry, says that the correct name of the site is not Masaon, as mentioned in *IAR*, but Mason, meaning deserted (*op. cit.*, p. 144, fn. 59).
130. *IAR, 1964-65*, p. 43.
131. *IAR, 1967-68*, p. 47.
132. *IAR, 1970-71*, p 39.
133. *IAR, 1964-65*, p. 43; *1965-66*, p. 52; *1967-68*, p. 47; *1970-71*, p. 39.
134. *IAR, 1970-71*, p. 39.
135. *IAR, 1967-68*, p. 47.
136. *Ibid.*
137. *IAR, 1961-62*, p. 56.
138. H.A. Giles, *op. cit.*, p. 41.

139. T. Watters, *op. cit.*, Vol. II, pp. 25-26.
140. *Ibid.*, p. 28.
141. From the 1970-71 excavations the period covering the early centuries of the Christian era has been recognised as Period IV (*IAR, 1970-71*, p. 7; *1971-72*, p. 7).
142. *IAR, 1962-63*, p. 6.
143. *IAR, 1964-65*, p. 7.
144. *IAR, 1970-71*, p. 7.
145. *IAR, 1962-63*, p. 6.
146. *IAR, 1963-64*, p. 8; *1964-65*, p. 7.
147. *IAR, 1963-64*, p. 8.
148. *IAR, 1962-63*, p. 6; *1963-64*, p. 8; *1964-65*, p. 7; *1968-69*, p, 6; *1970-71*, p. 7; *1971-72*, p. 7.
149. *IAR, 1958-59*. p. 12.
150. *Ibid.*
151. *IAR, 1959-60*, p. 16.
152. B.P. Sinha and S.R. Roy, *Vaiśāli Excavations (1958-62)*, p. 132.
153. *Ibid.*, p. 40.
154. S. Beal, *Buddhist Records of the Western World*, Vol. II (1906), pp. 66-67.
155. *Ibid.*, p 66.
156. *Ibid.*, p. 73.
157. *Ibid.*, p. 74.
158. *IAR, 1971-72*, p. 5.
159. *IAR, 1970-71*, p. 5.
160. S. Beal, *op, cit.*, p. 192.
161. *IAR, 1963-64*, pp. 8-9; *1965-66*, p. 11.
162. For the details of various excavations conducted at this site, see *ASIR-Gunningham*, XI. pp. 153-54; *ASI-AR, 1912-13*, p. 77; *AR-ASI-EC. 1912-13*, pp. 57-8; 1913-14; *passim*; L.A. Waddell, *Report on the Excavations at Pāṭaliputra, passim*; A.S. Altekar & V.K. Mishra, *Report on Kumrahar Excavations (1951-55)*, pp. 14-18; B.P. Sinha & L.A. Narain, *Pāṭaliputra Excavation (1955-56)*, pp. 10-18.
163. *AR-ASI-EC, 1913-14, passim.*
164. A.S. Altekar & V.K. Mishra, *op. cit.*, p. 29.
165. *Ibid.*, p. 20.
166. *Ibid.*
167. *Ibid*, pp. 15-16.
168. B.P. Sinha & L.A. Narain, *op. cit.*, p. 14.
169. S. Beal, *op. cit.*, p. 82.
170. *Ibid.*, pp. 85-86.
171. Y.D. Sharma, *op. cit.*, p. 61.
172. A Ghosh, 'Rajgir 1950', *AI*, no. 7, pp. 70-71.
173. S. Beal, *op. cit.*, p. 165.
174. *Ibid.*
175. *Ibid.*, p. 167.
176. B.P. Sinha & B.S. Verma, *Sonpur Excavation* (1956 and *1959-62*), p. 13.
177. *Ibid.*, p. 11.
178. The surface finds do not indicate in any way the existence of post-Kuṣāna antiquities. Some of them can be clearly identified with objects discovered from stratified layers.
179. B.P. Sinha & B.S. Verma, *op. cit*,, p. 13.
180. *IAR, 1964-55*, p, 6.
181. *Ibid.*
182. B.B. Lal, 'Śiśupālgarh 1948: An Early Historical Fort in Eastern India', *AI*, no. 5, pp. 67-72.
183. *IAR, 1971-72*, pp. 29-30.
184. *IAR, 1964-65*, pp. 17-18.
185. *Ibid.*, p. 18.
186. H.D. Sankalia & others, *Report on Excavations at Maheshwar and Navadatoli* (1958), p. 20.
187. *Idem, From History to Pre-History at Navasa* (1960), p. 64.
188. H.D. Sankalia & M.G. Dikshit, *Excavations at Brahmapuri*

(*Kolhapur*) 1952), p. 40.

189. H.D. Sankalia & S.B. Deo, *Report on the Excavations at Nasik and Jorwe* (19.0-51), p. 27.
190. R.N. Mehta & S,N. Chaudhary, *Excavations at Devnimori* (1966), p. 27.
191. R.N. Mehta & A.J. Patel, *Report on Excavations at Shamalaji* (1967), p. 6.
192. B.N. Chapekar, *Report on the Excavations at Ter. 1958* (1969), p. IV.
193. T. Watters, *op. cit.*, Vol. I, p. 140.
194. *IAR, 1965-66*. p. 53; *1970-71*, pp. 41-45.
195. *IAR, 1970-71*, p. 44.
196. *IAR, 1960-61*, p. 67.
197. *IAR, 1970-71*, p. 44.
198. *IAR, 1965-66*, p. 53.
199. *IAR, 1970-71*. p. 45.
200. *IAR, 1962-63* pp. 4-5.
201. Y.D. Sharma. *op. cit.*, p. 79.
202. *IAR, 1961-62*, p 63.
203. *IAR, 1957-58*, p. 53.
204. *IAR, 1960-61*, p. 40.
205. *IAR, 1961-62*, p. 63.
206. *IAR, 1957-58*, p. 53.
207. *IAR, 1964-65*, p. 49.
208. *Ibid.*
209. *Ibid.*, p. 50.
210. *Ibid*, p. 49,
211. *IAR, 1971-72*, p. 51.
212. *IAR, 1963-64*, pp. 60-61.
213. *Ibid.*, p. 60.
214. Y.D. Sharma, *op. cit.*, p 78.
215. S. Beal, *op. cit.*, pp. 200-201.
216. *IAR, 1963-64*, p. 62; *1964-65*, p. 48.
217. 'The Bhagalpur Copper-Plate Inscription of Nārāyanapāla,' R. Mukherjee & S.K. Maity, *Corpus of Bengal Inscriptions* (1967), pp. 164-169.
218. 'The Manhali Copper-Plate Grant of Madanapāla', *Ibid*, pp. 211-17.
219. *Indian Antiquary*, Vol. XIV, pp. 166-168; Vol. XXI, pp. 97-101.
220. *EI*, Vol. XXIX, no. 1, B, 1.26.
221. *Ibid.*, no 7, 1.24.
722. *Ibid.*, Vol. XXXIII, no. 47. 1.2
223. *Supra*, Chapter III.
224. D.R, Mankad, *Yuga purāṇa* (1951); p. 20.
225. *Mbh.*, I. 71. 31.
226. *Ibid.*, I. 175. 38-46.
227. Ibid., XII. 137. 24; A.N. Bose, *Social and Rural Economy of Northern India* (1961), Vol. I, p. 131.
228. *Mahāvagga*, VI. 19.2; *Chullavagga*, VI.21.1.
229. B.N. Puri, *India Under the Kuṣānas* (1965), p. 114.
230. E.H. Johnston (ed. & tr.), *The Saundarānanda of Aśvaghosa* (*1975*), XIV. 13.
231. M.D. N. Sahi, 'Famine of the Gangetic Valley mentioned in *Yuga-Purana*—Its Date and Economic Aspect', *PIHC*, XXXII Session (1970), Vol. I, pp. 163-73.
232. *Ibid.*
233. A.N. Bose, *op. cit.*, p. 129ff; D,R. Das, *Economic History of the Deccan* (1969), pp. 116-19.
234. D.R. Mankad, *op. cit.*, p. 20
235. *Jātaka*, I. 36, 41, 75, 95, 124, 137; II. 199, 204, 213, 276; III. 360; V. 512, 526.
236. *Ibid.*, II. 163.
237. J.J. Jones (tr.), *Mahāvastu*, Vol. I, SBB, p. 208.
238. *Ibid.*, pp. 236-240.
239. *Ibid*, p. 34.
240. In this context the instances of the temporary abandonment of the site at the following places can be cited:

(i) Hastināpura from c. 800 to 600 B.C.; (ii) Mathurā after the NBP phase till the appearance of the Kuṣāṇa red ware; and (iii) several occupational breaks at Tāmralipti.

241. *Bṛhat-Saṁhitā*, III 16, 29; IV. 5, 23; V. 21, 24, 27. 34, 38, 39, 52, 54, 61, 75, 76, 78, 90, 92; VIII. 4, 10, 11, 16, 19, 20; IX. 14, 26, 35, 40; X. 5-6, 11, 13, 18; XIII. 8; XVII. 14, 15, 17, 18-19, XIX. 1, 7-9, 19-21; XXIV. 23, 33; XXXI. 1; XXXII. 10; XXXIV. 12; XXXV. 5; XXXIX. 4; XL. 5, 8, 10; XLVI. 42; XLVII. 16,
242. *Ibid.*, IV. 5, 11, 14; V. 30-31, 33, 36-37, 41, 55, 78; VII. 4, 6; VIII. 3. 42; IX. 30-31, 33, 40. 42, 43; X. 3, 7-8, 20; XII. 19; XVII. 18-19, 23, 24, 25, 26; XIX. 2; XXX. 13-14; XXXI. 4; XXXIII. 4, 5; XXXIX. 2. 5; XLVI. 27, 53; XLVII. 16; LIII 60; LXI. 6, 7, 9; LXXIX. 31.
243. *Ibid*, VIII. 52.
244. *Ibid.*, IV. 9; V. 29. 34; XXXI. 4; XXXIII. 9, 21; XXXIV. 12.
245. *Ibid.*, IV. 32; V. 28, 41; XI. 39.
246. *Ibid.*, IV. 14. 20, 27; V. 61; XXIV. 30.
247. *Ibid.*, III. 15; V. 44.
248. *Ibid.*, III. 3, 7, 18; VIII. 19; IX. 14, 18, 23, 41; X. 2, 20; XI. 13, 30, 31; XII. 19, 21; XVII. 5; XX. 1, 20; XXXIII. 12; XXXIV. 15, 16; XXXV. 4; XLVI, 27; XLVI. 45; XLVII. 13, 16; LVIII. 50; LXXXVIII. 24.
249. *Ibid.*, III. 26; IV. 13, 21; V. 20, 23, 55, 61; VI. 2, 5, 8; VII. 2, 3; VIII. 28, 43-44; IX. 37, 44; X. 2; XI. 31; XII. 18; XVII, 21-22, 33; XIX. 2, 19-21; XX. 2; XXX. 9, 26; XXXII. 14; XXXIII. 12; XXXIV. 16; XXXV. 5; XLIII. 64; XLVII. 13.
250. *Ibid.*, III. 37; V. 34; VII. 1, 18; VIII. 48; IX. 24, 36; XXI. 24. XXVII. 3; XXVIII. 10, 1 .
251. *Ibid.*, III 9-10; V. 63, 92: XVII 16; XXIV. 25.
252. *Ibid*, III. 6; VII 1, 18; VIII. 17, 19, 28; XIX. 7-9; XXXIV. 15: XXXV. 4.
253. *Ibid*, V. 63; XXI. 31.
254. *Ibid*, III. 9-10; V. 94; VIII. 28; IX 38.
255. *Ibid.*, III. 3; V. 23, 27, 58; VI. 9; VIII. 47; XI. 12, 30; XII. 21; XXV. 4. XLVI. 40, 71, 80; LXXVIII. 24.
256. *Ibid*, III. 26; IV. 29; V. 92; VI. 2, 4; VII. 2, 3, 7, 16, 18; VIII. 3, 17, 34, 42, 48, 51; IX. 18, 23, 33, 37, 44; XI. 31; XII. 19; XVII. 5; XXIV. 29; XXX. 15; XXXII. 14; XLV. 9; XLVI. 25, 27, 71; LIII. 60; LX. 6; LXXVIII. 24.
257. *Ibid.*, VIII. 40, 43-44.
258. Surprisingly, R.S. Sharma has made a deliberate attempt to undermine the role of floods in the decline of towns (*op. cit.*, p. 148). He has done this apparently to lend more credence to the theory of economic degeneration as responsible for the decay of towns in the Gupta and post-Gupta times, a theory which would have still stood its ground quite forcefully even without this partial emphasis.
259. *AP*, II, p. 23ff.
260. J. Marshall, *Taxila*, I, p. 115.
261. *IAR, 1970-71*, pp. 30-31.
262. B.B. Lal, 'Excavation at Hastināpura and Other Explorations in the Upper Ganga and Sutlej Basins 1950-52', *AI*, nos. 10-11,

p. 14.
263. *Ibid*, p. 19.
264. *Ibid.*, p. 9,
265. *IAR, 1968-69*, p. 37.
266. *ASI-AR, 1907-08*, pp. 89-90.
267. B. C. Law, *Śrāvasti in Indian Literature, MASI*, no. 50, p. 31.
268. G.R. Sharma, *Excavations at Kauśāmbī, 1959-60, MASI*, no. 74, p. 3.
269. *IAR, 1971-72*, p. 49.
270. *IAR, 1960-61*, p. 6.
271. Y. Mishra and S.R. Roy, *A Guide to Vaiśāli and the Vaiśāli Museum*, (1964), p. 14.
272. *IAR, 1965-66*, p. 11.
274. Waddell makes a fantastic suggestion that Pāṭaliputra was situated at or near the confluence of all the five great rivers of Mid-India, the Ganga, the Gogra, the Rapti, the Gandak and the Sone (*Report on the Excavations at Pāṭaliputra*, (1903, p. 2). This suggestion is undoubtedly misleading.
275. Quoted in A S. Altekar & V.K. Mishra, *op. cit.*, p. 12.
276. *AR-ASI-EC, 1912-13*, p. 57.
277. Waddell, *op. cit.*, p. 8.
278. M.S. Pandey, *The Historical Geography and Topography of Bihar* (1963), p. 75.
279. *ASIR-Cunningham*, XI, pp. 155-56.
280. *Ibid.*, p. 156.
281. R.P. Singh, 'The Decline of Pataliputra with Special Reference to Geographical Factors', *PIHC*, XXXVI Session (1975), p. 52.
282. It has been suggested that plague (Waddell, *op. cit.*, p. 8) and superstitions (*AR-ASI-EC, 1912-13*, p. 59) too might have played a crucial role in the decline of Pāṭaliputra.
283. *IAR, 1962-63*, p. 5.
284. *Ibid.*
285. *IAR, 1964-65*, p. 50.
286. M S. Mate, 'Early Historic Fortifications in the Ganga Valley', *Purātattva*, no. 3, pp. 58-69.
287. *Ibid.*, pp. 65-68.
288. *IAR 1956-57*, p. 20.
289. *IAR, 1954-55*, p. 18.
290. M.S. Mate, *op. cit.*, p. 68.
291. *Ibid.*
292. H. C. Raychaudhuri, *Political History of Ancient India*, pp. 535-536.
293. S.R. Goyal, *A History of the Imperial Guptas* (1967), pp. 41-53.
294. Marshall, *op, cit.*, p. 112.
295. *Ibid.*, p. 217.
296. T. Watters, *op. cit.*, Vol. I,
297. K. Prasad, *Kusāna Towns in in India* (unpublished Ph. D. Thesis, Patna University, 1978), pp. 359-360.
298. U. Thakur, *The Hūnas in India* (1967), p. 124.
299. *Ibid.*, p. 225.
300. K. Prasad too recognises the economic aspects of the destruction of cities and Buddhist monasteries by the Hūṇas, though in a very subdued tone (*op, cit.*, pp. 369-70).
301. U. Thakur, *op, cit.*, p. 225.
302. *AP*, II, p. 29.
303. *ASIR-Cunningham*, II, p. 158.
304. T. Watters, *op. cit.* p. 205.
305. Wheeler, *Charsada*, p. 6.
306. Marshall, *op. cit.*, p. 284.
307. *Ibid.*, p. 285.
308. *Ibid.*, p. 266.
309. B.S. Guha, 'Report on the Human Remains from the Dharmarājikā,'; Marshall, *op. cit.*, pp. 294-314.
310. Marshall, *op. cit.*, p. 352.

311. *Ibid.*, p. 395.
312. *Ibid.*, p. 359.
313. *Ibid.*, p. 387.
314. That some of the skeletons excavated from Dharmarājikā might be of the Hūṇas (B.S. Guha, *op. cit.*, p. 296), suggests that while plundering this monastery the invaders were resisted leading to some loss in human lives on the part of the invading army also.
315. Y.D. Sharma, *op. cit.*, pp. 49-50.
316. *IAR, 1969-70*, p. 31.
317. *IAR, 1954-55*, p. 18.
318. G R. Sharma, *op. cit.*, p. xx; *idem, Excavations at Kauśāmbī (1958-59)*, pp. 15-16, 37.
319. *IAR, 1957-58*, p. 48.
320. *ASI-AR, 1911-12*, p. 34.
321. *AR-ASI-CC, 1905*, p. 41.
322. *ASI-AR, 1906-07*, p 51.
323. *ASIR-Cunningham*, I, p. 126ff.
324. *Ibid.*
325. *AR-ASI-EC, 1904*, p. 18.
326. *Ibid., 1912-13*, pp. 58-59.
327. *Ibid.*, p. 58.
328. A.S. Altekar & V.K. Mishra, *op. cit.* pp. 16-17.
329. Cf. B.P. Mazumdar, *Socio-Economic History of Northern India* (1030-1194 A.D.), (1960), p. 245.
330. *Rājataraṅgiṇī*, VII. 1323-5.
331. VII. 1325; VIII. 734, 1127, 1169-85
332. L. Gopal, *The Economic Life of Northern India, c. A.D. 700-1200* (1965), pp. 254-255.
333. The origins and even the existence of feudalism in the Indian context are matters of great controversy among Indologists. For views in favour of the existence of feudalism, see R.S. Sharma, *Indian Feudalism c. 300-1200*; *idem*, 'Indian Feudalism Retouched', *IHR*, Vol. I, no. 2, pp. 320-30; L.B. Alayeva, 'Some Problems of Feudalism in the Works of Indian Historian', *Narodi Asia-i-Afriki* (1964), pp. 175-83; E.M. Medvedev, 'Socio-Economic History of Ancient India', *Narodi Asia-i-Afriki* (1967), pp. 65-67; S.A.Q. Hussaini, *The Economic History of India*, Vol. I (1962); L. Gopal, *op. cit.* (1965); R.K. Choudhary, 'Some Historical Aspects of Feudalism in Ancient India', *Journal of Indian History*, Vol. XXXVII, pt. III, pp. 385-406; Vol. XXXVIII pt. I, pp. 193-202; D.D. Kosambi, *An Introduction to the Study of Indian History* (1975), pp. 295-405; B.N S. Yadav, 'Immobility and Subjection of Indian Peasantry in Early Medieval Complex', *IHR*, Vol, I, no. 1, pp. 18-27; V.K. Thakur, 'Beginnings of Feudalism in Bengal', *Social Scientist*, Vol. 6, no. 6/7, pp. 68-62; *idem* 'Beginnings of Feudalism in Mithila (*c.* A.D. 800-1500)', *The Current Studies* (1977-78), pp. 38-46. For views against the prevalence of feudal institutions in India, see D.C. Sircar, *Landlordism and Tenancy in Ancient and Medieval India as Revealed by Epigraphic Records* (1969); *idem, Studies in the Political and Administrative Systems of Ancient and Medieval India* (1974); *idem* (ed.), *Land System and Feudalism in Ancient India* (1966), Shri Abdul Hamid holds the feudal mode of production arose here earlier than anywhere else in the world, cf. Abdul Hamid, *Ancient Indian*

History in a New Light (Sreejani-Dacca, 1978). German scholars Ritschi, Eva and Maria Schietelich (*Studien Zum Kauṭilya AŚ*, Berlin, 1973), suggest that the germs of feudalism can be traced to the *AŚ*, with the only difference that the central power intervened in economic and political life of the village. After the Mauryas collective exploitation changed into individual exploitation because of the transferred taxes and other prerogatives to the donee, cf. R.K. Chaudhary, *Kauṭilya's Political Ideas and Institutions*, (1971).

334. R.S. Sharma, 'The Origins of Feudalism in India, (c. A.D. 400-650)', *JESHO*, Vol. I, pt. III, p. 327.
335. D.C. Sircar, *Select Inscriptions Bearing on Indian History and Civilisation*, Vol. I (1942), pp. 192, 194-195.
336. *Ibid.*, p. 422, 11. 26-29.
337. D.N. Jha, *Revenue System in Post-Maurya and Gupta Times* (1967), p. 129.
338. *EI*, Vol. XXVI, no. 20, 1. 19-26.
339. Kālidāsa, *Raghuvaṁśa*, XVII. 66.
340. J.F. Fleet. *CII*, Vol. III (1929), no. 41, 1-8; D,C. Sircar, *op. cit.*, p. 422, 1.29.
341. Fleet, *op. cit.*, p. 14, 24-30.
342. 'The Nandanpur Copper-Plate Inscription of Gupta Era 169'.
343. VII. 115-20.
344. *Bṛhospati*, XIX, 44.
345. R.S. Sharma, *Indian Feudalism: c. 300-1200*, pp. 9-11.
346. Watters, *op. cit*, Vol. I, p. 176; S. Beal, *op. cit.*, Vol. I, p. 88.
347. D.D. Kosambi's theory of "Feudalism from above" (*op. cit.*, pp. 295-296) does not seem to be correct. Surprisingly, he discounts the existence of an intermediary class in land; he thinks that the feudal chiefs or subordinate officers were in direct contact with the peasantry (*ibid.*).
348. *Yājñavalkya*, II. 157.
349. *Bṛhaspati*, XIX. 54-55.
350. *Yājñavalkya*, II. 158.
351. *Bṛhaspati*, XIX. 54-55.
352. Fleet, *op. cit*, no. 25, 11. 14-15; no. 31, 11.7-11.
353. *Ibid.*, no. 50, 1.10.
354. R.S. Sharma, 'The Origins of Feudalism in India (c. A.D. 400-650)', *JESHO*, Vol. I, pt. 3, p. 316.
355. Ho Chang-Chun, 'Fa-hsien's Pilgrimage to Buddhist Countries', *Chinese Literature*, no. 3 (1956), p. 153.
356. J. Legge, *A Record of Buddhistic Kingdoms* (1886), pp. 42-43.
357. Fleet, *op. cit*, p. 98, fn. 2.
358. V.K. Thakur, 'Forced Labour in the Gupta Period', *PIHC*, XXXVIII Session (1977), pp. 145-51.
359. S.K. Maity, *Economic Life in Northern India in the Gupta Period* (1970) pp. 84-86.
360. *Bṛhaspati*, XVII. 11-12.
361. R.S. Sharma, *Light on Early Indian Society and Economy*, pp. 84-85.
362. For details regarding the paucity of coins in the post-Gupta period, see V.K. Thakur, 'Economic Changes in Early Medieval India (c. A.D. 600-1290)', *D.D. Kosambi Commemoration Volume* (ed. L. Gopal, 1977), pp. 189-91.
363. Md. Aquique, *Economic History of Mithila (c. 600 B.C.—1097*

A.D.), 1974, pp. 141-44.

364. D.B. Chattopadhyaya, 'Trade and Urban Centres in Early Medieval North India', *IHR*, Vol. I, no. 2, p. 218.

365. S.K. Maity, *op. cit*, p. 176. According to Pliny, "at the lowest reckoning one hundred million sesterces are taken from us every year by India, the Seres and Arabia" (cited in Cunningham, *Coins of Ancient India from the Earliest Century down to the Seventh Century A.D.*, 1891, p. 50). One hundred million sesterces was equivalent to approximately £800,000 in the late 19th century, and this may indicate the amount of profit India was deriving from this trade.

366. K. Prasad, *op, cit*,, p. 291ff.

367. S.K. Maity, *op. cit.*, p. 175ff.

368. R. Pankhurst, *An Introduction to the Economic History of Ethiopia* (1961), pp. 46-47.

369. U. Thakur, *op. cit.*, p. 225.

370. S.K. Maity, *op. cit.* pp. 172-175.

371. It has been suggested that large-scale deforestation in the Ganga basin, caused by over-grazing and clearance of forests, might have diminished the supply of nitrogen, reduced rainfall and impoverished the hinterland on which towns thrived (R.S. Sharma, 'Decay of Gangetic Towns in Gupta and Post-Gupta Times', *JIH*, Golden Jubilee Volume, pp. 149-50). But here it can be noted that clearance of forests would have led to the availability of more land, a fact which should have been instrumental in giving rise to more towns, instead of pulling down the existing ones. Moreover, due to the recurrent floods in this area whatever impact might have been felt by the soil due to deforestation would have been compensated by the silt deposits left by the receding flood waters. As far as the reduction in rainfall is concerned, it is noteworthy in this context that Varāhamihira explicitly refers to good and excessive rainfalls, a fact that might suggest that probable decrease in rainfall was not a perennial problem for agriculturists. One will also have to explain as to why the grievious effects of deforestation became operate throughout the whole area had not been deforested during one period.

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